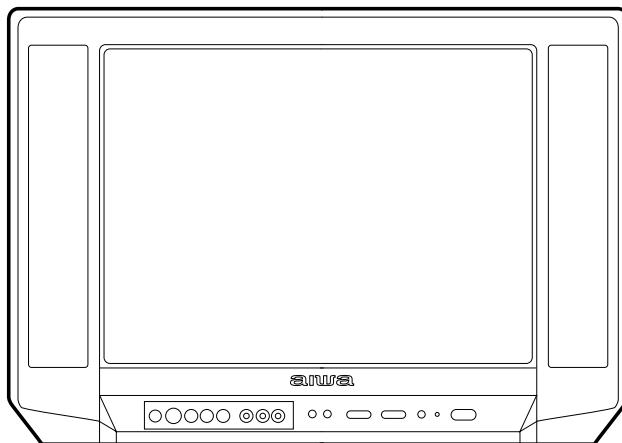




TV-F2100

HT,NH



SERVICE MANUAL

COLOR TELEVISION

TYPE
NH1M
NH1C1M
HT1M

- This Service Manual is the “Revision Publishing” and replaces “Simple Manual” TV-F2100 (NH), (S/M Code No. 09-007-432-1T2).
- This Service Manual does not include “ADJUSTMENT”. This item will be issued in the next Supplement.

aiwa
S/M Code No. 09-008-432-1R2

REVISION
DATA

SPECIFICATIONS

Tuner System	Frequency synthesized tuner
TV System	NTSC-M
Channel Coverage	VHF: 2 to 13 UHF: 14 to 69 CATV: 5A, A-1 to A-5, A to W, W+1 to W+84
Program Memory	181
Antenna Input	75 ohms, unbalanced
Picture Tube	21 in
Screen Size	406 (W) x 305 (H) mm (16 x 12 ¹ / ₈ in.)
Video Input	508 mm (diagonal) (20 in.)
Audio Input	1 Vp-p 75 ohms
Speaker	0.5 Vrms., 33 k ohms more
Operating Voltage	120 x 60 mm (4 ³ / ₄ x 2 ³ / ₈ in.)
NH	NH: 110-240 V AC, 50/60 Hz
HT	HT: 110 V AC, 50/60 Hz
Power Consumption	110 W
Phones Jack	Stereo-mini jack
Operating Temperature	5 °C – 40 °C
Operating Humidity	35 % – 80 %
Dimensions	610 (W) x 440 (H) x 485 (D) mm (24 ¹ / ₈ x 17 ³ / ₈ x 19 ¹ / ₈ in.)
Weight	24.1 kg (53.02 lbs.)

- Design and specifications are subject to change without notice.

ACCESSORIES / PACKAGE LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-JE7-955-010		RC UNIT,RC-AVT01<NH1M,NH1C1M>
1	8A-JE7-960-010		RC UNIT,RC-AVT06<HT>
2	8A-JE5-904-010		IB,NH (ES) -F2500/2100<NH1M>
2	8A-JE5-906-010		IB,HT (E/CH) -F2500/2100<HT>
2	8A-JE5-907-010		IB,NH (E) -F2500/2100<NH1C1M>
	3 87-B30-311-010		ADAPTOR,300 75 TSN-02
△	4 87-A91-015-010		PLUG,CONVERSION JT-0475A

NOTICES BEFORE REPAIRING

To make the best use of this equipment, make sure to obey the following items when repairing (or mending).

1. Do not damage or melt the tunicate of the leading wire on the AC1 side, including the power supply cord.
2. Do not soil or stain the letters on the spec. inscription plates, notice labels, fuse labels, etc.
3. When repairing the part extracted from the conducted side of the board pattern, fix it firmly with applying bond to the pattern and the part.
4. Restore the following items after repairing.
 - 1) Conditions of soldering of the wires (especially, the distance on the AC1 side).
 - 2) Conditions of wiring, bundling of wires, etc.
 - 3) Types of the wires.
 - 4) Attachment conditions of all types of the insulation.
5. After repairing, always measure the insulation resistance and perform the voltage-withstand test (See Fig-1).
 - 1) The insulation resistance must be 3.8 to 5.6 MΩ when applying 500V per second.
 - 2) In the voltage withstand test, apply 1 kV for 1 minute and check that the GO lamp lights.

- * Breaking current set to 10 mA.
- * Connect the safety checker as shown in Fig-1, then measure the resistance and perform the test.
- * Do not touch the equipment during testing.
- * For details of the safety checker, refer to the supplied Operation manual.

When servicing and checking on the TV, note the followings.

1. Keep the notices.
As for the places which need special attentions, they are indicated with labels or seals on the cabinet, chassis and parts. Make sure to keep the indications and notices in the operation manual.
2. Avoid an electric shock.
There is a high voltage part inside. Avoid an electric shock while the electric current is flowing.
3. Use the designated parts.
The parts in this equipment have the specific characteristics of incombustibility and withstand voltage for safety. Therefore, use a part which has the same character as the replaced part. Especially as to the important parts for safety which is indicated in the circuit diagram or the table of parts with a △ mark, the designated parts must be used.
4. Put parts and wires in the original position after assembling or wiring.
There are parts which use the insulation material such as a tube or tape for safety, or which are assembled so that these parts do not make contact with the printed

Insulation resistance: 3.8 to 5.6 MΩ (500 V/s)
Voltage-withstand: 1 kV for 1 minute

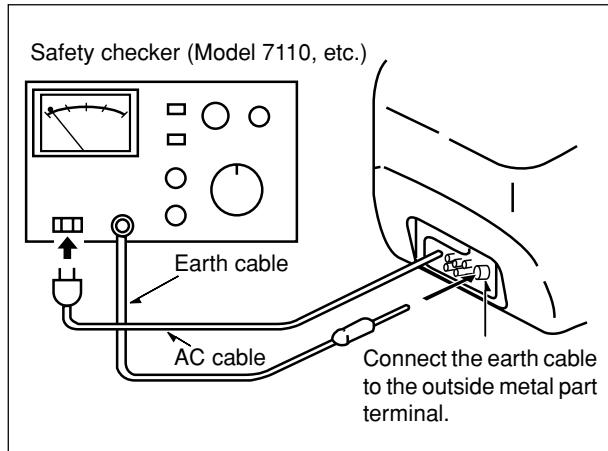


Fig-1

- board. The inside wiring is designed not to get close to the pyrogenic parts and high voltage parts. Therefore, put these parts in the original positions.
5. Take care of the cathode-ray tube.
By setting an explosion-proof cathode-ray tube in this equipment, safety is secured against implosion. However, when removing it or servicing from the back, it gives out shock that is dangerous. Take enough care to deal with it.
6. Avoid an X-ray.
Safety is secured against an X-ray by giving considerations to the cathode-ray tube and the high voltage peripheral circuit, etc. Therefore, when repairing the high voltage peripheral circuit, use the designated parts and do not change the circuit. Repairing, except indicates, causes rising of high voltage, and the cathode-ray tube emits an X-ray.
7. Perform a safety check after servicing.
Confirm that the screws, parts and wiring which were removed in order to service are put in the original positions, or whether there are deteriorated portions around the places serviced.

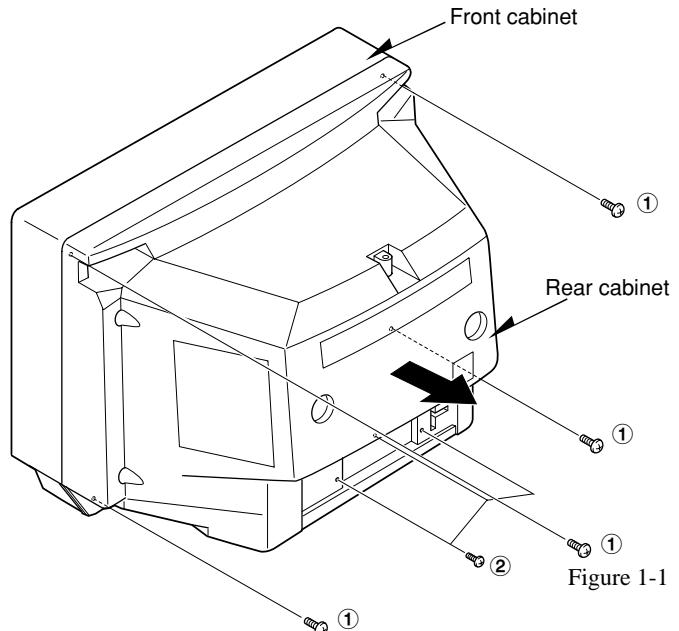
Safety Components Symbol

This symbol is given to important parts which serve to maintain the safety of the product, and which are made to confirm to special Safety Specifications. Therefore, when replacing a component with this symbol make absolutely sure that you use a designated part.

DISASSEMBLY INSTRUCTIONS

1. REAR CABINET REMOVAL

- (1) Remove four screws ①, and three screws ②, then remove the rear cabinet in the direction of the arrow. (See Figure 1-1)



2. HIGH-VOLTAGE CAP (ANODE CAP) REMOVAL

2-1. Cautions before Removing

Discharge the anode voltage

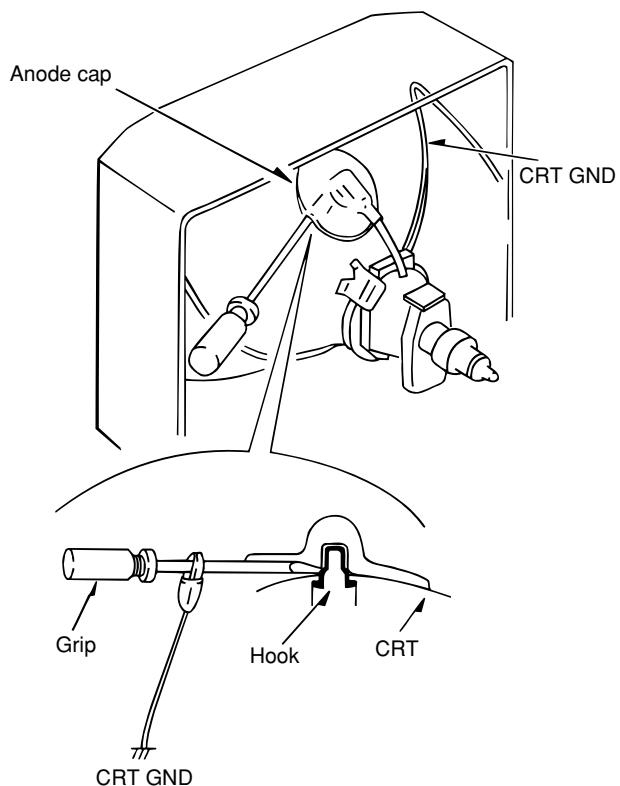
- (1) The anode voltage is not discharged completely from the CRT of this unit even after the power is turned off. Be sure to discharge the residual anode voltage before removing the anode cap.

Do not use pliers

- (2) Do not use pliers, etc. to remove the anode cap. If you used pliers and bent the hook to remove the cap, the spring characteristics of the hook could be lost, and when reinstalled, the cap would come off from the CRT anode button easily, causing an accident.

Do not turn the anode cap

- (3) If the anode cap is turned in the direction of its circumference, the hook is likely to come off.



2-2. Anode Cap Removal

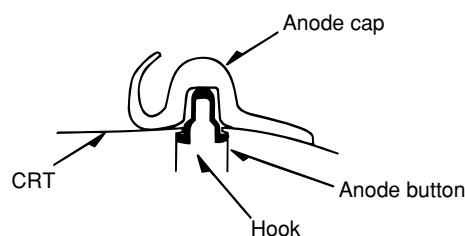
Discharge the anode voltage. (See Figure 2-1)

- (1) Connect a flat-bladed screwdriver to the CRT GND via an alligator clip.
- (2) Use a tester to check the end of the screwdriver and ground of the TV for continuity.
- (3) Touch the hook with the end of the screwdriver.

Caution : Be careful not to damage the anode cap.

- (4) Turn over the anode cap.

Caution : Be careful not to damage the anode cap.



- (5) Push the anode cap with your thumb in the direction of arrow ① as shown in the figure, then lift the cap in the direction of arrow ② to release the hook on one side.
(See Figure 2-3)

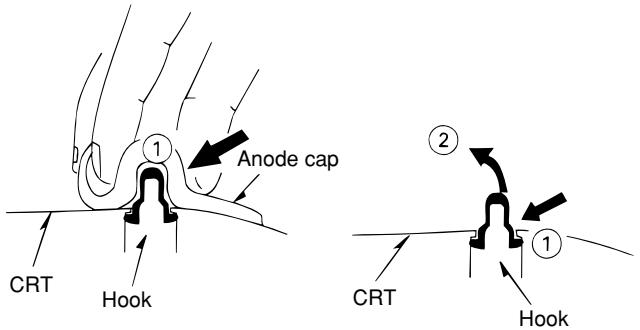


Figure 2-3

- (6) Turn over the anode cap on the side where the hook was released and pull out the cap in the direction opposite to that on which the cap was pushed. (See Figure 2-4)
Caution : Do not pull out the anode cap straight up.
: Do not pull the cap forcibly. After removing the cap, check that the hook is not deformed.

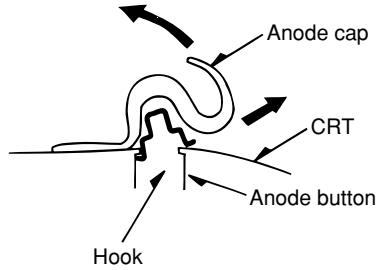


Figure 2-4

3. ANODE CAP REINSTALLLTION

Observe the cautions carefully so that no accident occurs due to a defect in installing the anode cap and so it does not come off.

3-1. Caution before Reinstalling

Never turn the anode cap after installing it

Never re-use the hook when it has been deformed

- (1) If the anode cap is turned after it is installed, it may come off. Therefore, arrange the high-voltage cable before attaching the anode cap. (See Figure 3-1)
- (2) If you have attached the anode cap before arranging the high-voltage cable, arrange the cable carefully so the cap does not turn.

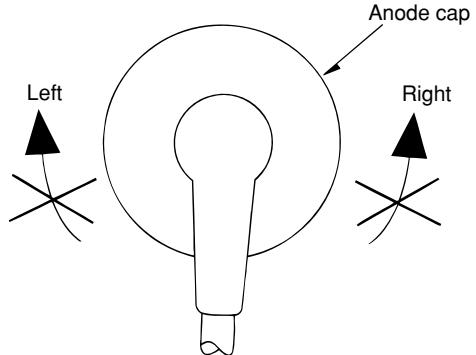


Figure 3-1

3-2. Anode cap reinstallation

- (1) Use a clean cloth moistened slightly with alcohol to clean the installation section. (See Figure 3-2)
Caution : Check that the installation section is free from dust, foreign matter, etc.
- (2) Coat the anode cap installation circumference with an appropriate amount of the specified silicone grease (KS-650N).
Caution : Be careful that silicone grease does not enter the anode button.

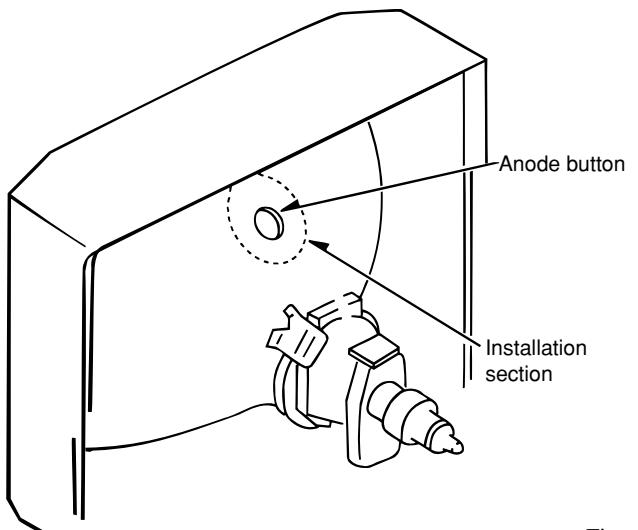


Figure 3-2

- (3) Eliminate twisting, etc. of the high-voltage cable and arrange it so that no twisting occurs. (See Figure 3-3)
Caution : If the cable is not arranged correctly, the anode cap could turn and cause an installation defect.

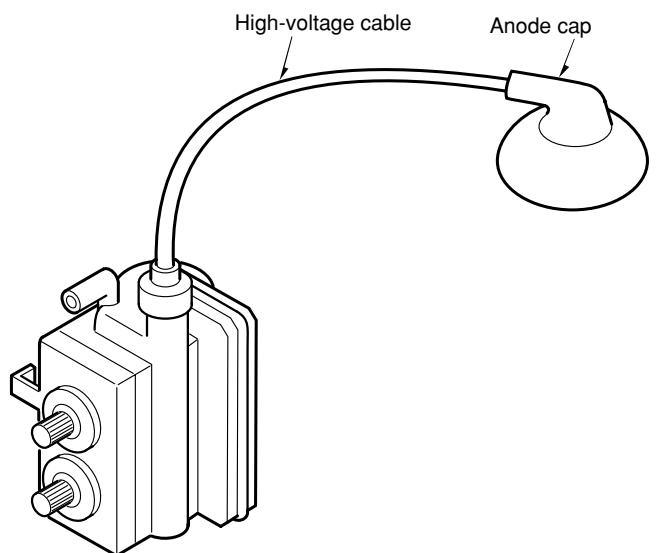


Figure 3-3

- (4) Turn over the rubber cap symmetrically on the left and right. (See Figure 3-4)
Caution : Take great care not to damage the anode cap.

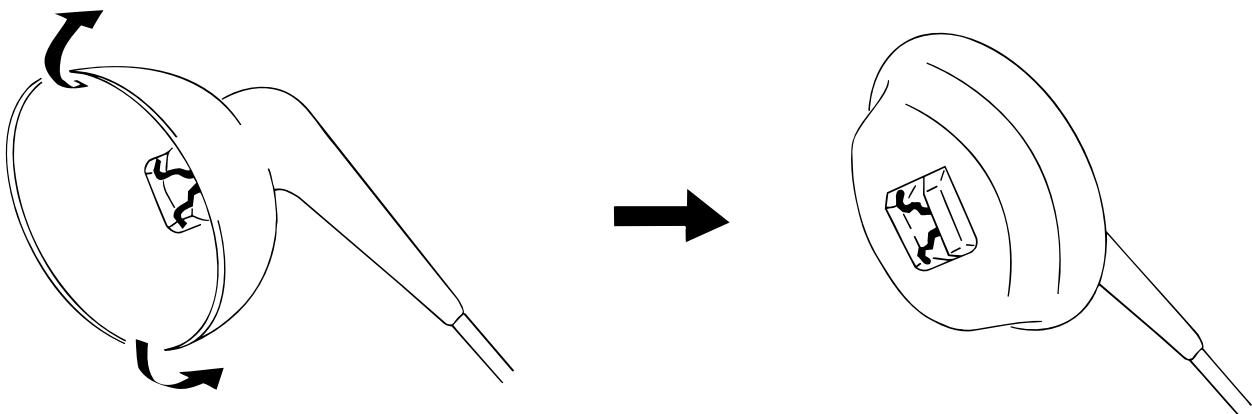


Figure 3-4

- (5) Fit your forefinger over the projection at the center of the cap and hold the cap between your thumb and middle finger. (See Figure 3-5)

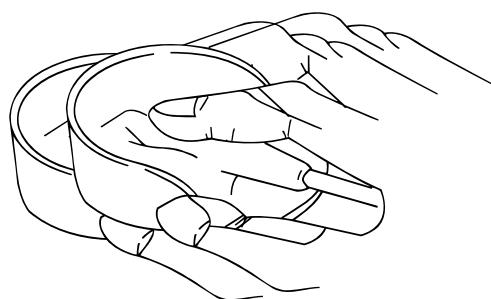


Figure 3-5

- (6) Apply the hook on one side to the anode button as shown on the figure. (See Figure 3-6)
- Caution :** Check that the hook is held securely.
- (7) Apply the hook on the other side to the anode button as shown in Figure 3-7.

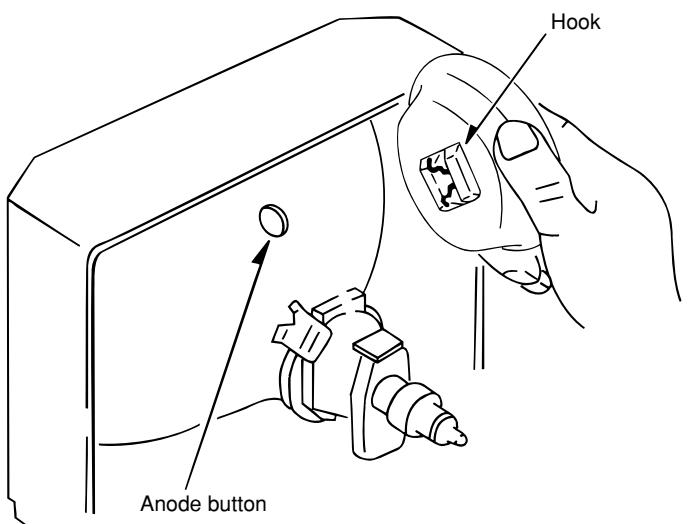
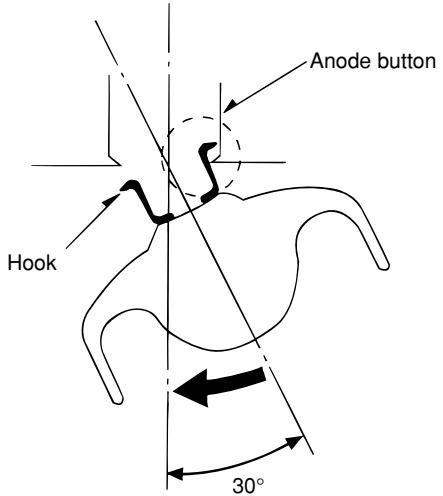


Figure 3-6

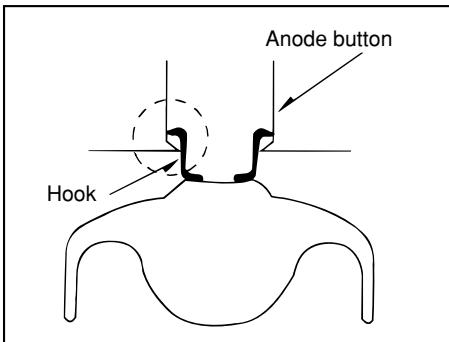


Figure 3-7

- (8) Pull the anode cap slightly with the rubber cap turned over and visually check that the hook is engaged securely.
 - (9) Release your hand from the rubber cap of the anode cap.
- Caution :** Cover the anode cap so that it does not lift.
- (10) Hold the skirt of the anode cap slightly to improve the close contact between the cap and CRT.
 - (11) Check that the anode cap is in close contact with the CRT. (See Figure 3-8)

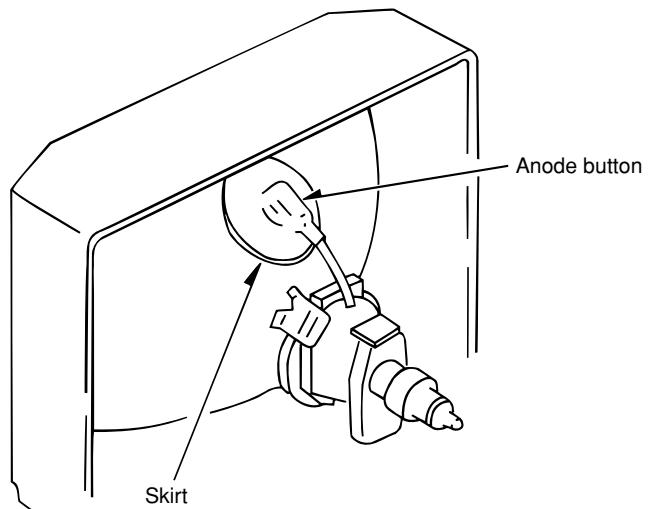


Figure 3-8

4. NK C.B REMOVAL

- (1) Disconnect CN903 (CRT GND).
- (2) Disconnect CN901, CN902, CN951, CN952.
- (3) Remove the NK C.B. in the direction of arrow ①.
(See Figure 4-1)

5. MAIN C.B REMOVAL

- (1) Remove connector (CN404).
- (2) Remove connector (CN807).
- (3) Remove connector (CN882).
- (4) Pull out the MAIN C.B. in the direction of the arrow ②
(See Figure 4-1).

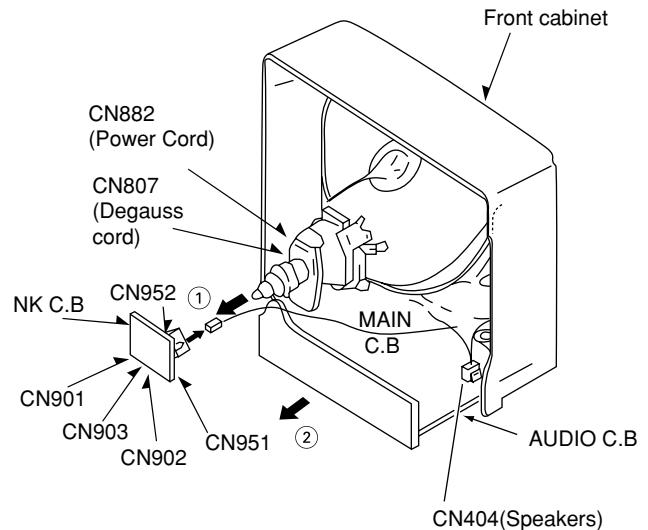


Figure 4-1

ELETTRICAL MAIN PARTS LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC							
8A-JE7-625-010	IC,M37272M8-503SP<HT>			87-A40-553-080			DIODE,1N4003 LES
8A-JE7-623-010	IC,M37272MA-055SP<NH1M,NH1C1M>			87-A40-503-080			ZENER,MTZJ39B
87-A91-538-010	RCR UNIT,SBX1981-72P			87-A40-785-080			DIODE,SB040
87-A21-378-010	IC,S-24C04BDP-1A			87-A40-856-080			DIODE,UF4007
87-A20-611-080	IC,M51943BSL-700A<NH1M>			87-A40-850-090			DIODE,RL4A
				MAIN C.B			
87-001-536-010	IC,NJM78M05FA			C1	87-010-405-080		CAP, ELECT 10-50V
8Z-JBJ-605-010	IC,TA1268N			C2	87-018-209-080		CAP, CER 0.1-50V
87-A21-103-040	C-IC,MM1454XFBE			C3	87-018-134-080		CAPACITOR,TC-U 0.01-16
87-A21-022-040	C-IC,BA3880FS			C4	87-018-127-080		CAP, CER 470P-50V
87-A21-554-010	IC,TA1216AN			C5	87-010-401-080		CAP, ELECT 1-50V
87-A21-283-010	IC,AN5277			C6	87-018-209-080		CAP, CER 0.1-50V
87-A21-220-010	IC,MM1311AD			C7	87-010-248-080		CAP, ELECT 220-10V
87-A21-219-010	IC,TC90A45P			C8	87-018-123-080		CAP, CER 220P-50V
87-070-237-010	IC,LA7832			C9	87-010-401-080		CAP, ELECT 1-50V
87-070-417-010	IC,NJM4558 DD			C10	87-018-131-080		CAP, CER 1000P-50V
8Z-JBH-605-010	IC,CXA2104S			C11	87-018-134-080		CAPACITOR,TC-U 0.01-16
87-A21-344-010	IC,STR-F6656			C12	87-018-119-080		CAP, CER 100P-50V
87-A21-457-010	IC,SE120N			C13	87-018-119-080		CAP, CER 100P-50V
87-020-969-010	IC,NJM78M09FA			C14	87-010-263-080		CAP, ELECT 100-10V
87-A20-389-010	IC,NJM7809FA			C15	87-018-119-080		CAP, CER 100P-50V
87-A21-133-080	IC,BMR-010D<HT,NH1C1M>			C16	87-018-131-080		CAP, CER 1000P-50V
				C17	87-018-128-080		CAP, CERA-SOL SS 560P
TRANSISTOR				C18	87-018-109-080		CAP, CER 22P-50V
87-A30-065-080	TR,2SC2785FE			C19	87-018-109-080		CAP, CER 22P-50V
87-026-269-080	TR,DTA114ES			C20	87-018-119-080		CAP, CER 100P-50V
87-A30-066-080	TR,2SA1175FE			C21	87-018-109-080		CAP, CER 22P-50V
87-026-219-080	TR,DTA144ES (0.3W)			C22	87-018-109-080		CAP, CER 22P-50V
87-026-218-080	TR,DTC144ES (0.2W)			C23	87-018-123-080		CAP, CER 220P-50V
89-324-122-080	TR,2SC2412K			C24	87-018-209-080		CAP, CER 0.1-50V
89-110-372-080	TR,2SA1037(140MHZ 200MW)			C25	87-018-119-080		CAP, CER 100P-50V
87-A30-062-080	C-TR,KRC104S			C101	87-010-404-080		CAP, ELECT 4.7-50V
89-324-820-080	TR,2SC2482			C104	87-010-248-080		CAP, ELECT 220-10V
87-A30-364-010	TR,2SD2578-CA			C105	87-018-134-080		CAPACITOR,TC-U 0.01-16
87-A30-363-010	TR,2SD2531			C106	87-A10-207-080		CAP,TCS 0.01-50KBUP050
89-110-154-080	TR,2SA1015Y			C112	87-018-109-080		CAP, CER 22P-50V
89-318-155-080	TR,2SC1815 (0.4W)			C113	87-018-109-080		CAP, CER 22P-50V
87-026-463-080	TR,2SA933S (0.3W)<NH1M>			C201	87-018-134-080		CAPACITOR,TC-U 0.01-16
87-A30-216-080	TR,2SA933AS(R)<HT,NH1C1M>			C202	87-018-134-080		CAPACITOR,TC-U 0.01-16
89-110-913-080	TR,2SA1091-O			C203	87-010-400-080		CAP, ELECT 0.47-50V
87-A30-344-010	TR,2SC5147D			C204	87-018-134-080		CAPACITOR,TC-U 0.01-16
87-026-462-080	TR,2SC1740SR (0.3W)			C205	87-010-237-080		CAP, ELECT 1000-16V
89-407-742-080	TR,2SD774			C206	87-A10-287-080		CAP,M 2200P-50 J
89-118-370-010	TR,2SA1837			C207	87-010-400-080		CAP, ELECT 0.47-50V
89-347-930-010	TR,2SC4793			C208	87-018-134-080		CAPACITOR,TC-U 0.01-16
87-A30-524-080	TR,2SC2925-T			C209	87-010-385-080		CAP, ELECT 220-25V
DIODE				C210	87-A11-080-080		CAP,TC U 47P-50 J CH
				C211	87-A11-080-080		CAP,TC U 47P-50 J CH
				C212	87-A11-080-080		CAP,TC U 47P-50 J CH
				C213	87-A11-082-080		CAP,TC U 56P-50 J CH
				C214	87-018-134-080		CAPACITOR,TC-U 0.01-16
△				C229	87-018-149-080		CAP,TC-U 15P-50 CH
87-017-932-080	ZENER,MTJ6.2B			C301	87-010-403-080		CAP, ELECT 3.3-50V
87-020-465-080	DIODE,1SS133 (110MA)			△ C302	87-018-134-080		CAPACITOR,TC-U 0.01-16
87-002-743-080	ZENER,MTZJ 33B			C305	87-018-126-080		CAP,TC-U 390P-50 B
87-A40-235-080	ZENER,MTZJ9.1C			C306	87-010-405-080		CAP, ELECT 10-50V
87-A40-690-080	ZENER,MTZJ11B			C307	87-A10-299-080		CAP,M 0.022-50 J
87-A40-286-080	DIODE,RGP10JE-5025			C308	87-010-401-080		CAP, ELECT 1-50V
87-A40-348-080	ZENER,MTZJ3.3A			C309	87-018-147-080		CAP,TC-U 10P-50 CH
87-A40-234-080	ZENER,MTZJ5.6A			C311	87-018-209-080		CAP, CER 0.1-50V
87-A40-318-080	ZENER,RM26 V1			C312	87-018-209-080		CAP, CER 0.1-50V
87-070-092-080	DIODE,S5566B			C313	87-018-209-080		CAP, CER 0.1-50V
87-A40-735-090	DIODE,ERC06-15			C314	87-018-134-080		CAPACITOR,TC-U 0.01-16
87-A40-001-080	ZENER,MTZJ12C			C315	87-018-123-080		CAP, CER 220P-50V
87-017-593-090	DIODE,RGP15J			C316	87-A10-378-080		CAP,E 2.2-50 K SH
87-017-654-060	DIODE,GBU6J			C317	87-010-402-080		CAP, ELECT 2.2-50V
87-A40-828-080	DIODE,AK 04			C318	87-018-134-080		CAPACITOR,TC-U 0.01-16
87-A40-825-090	DIODE,RN 1Z			C319	87-010-237-080		CAP, ELECT 1000-16V
87-A40-734-010	DIODE,FML-G12S						
87-A40-927-080	DIODE,1SS119-041 TA<HT,NH1C1M>						
87-017-650-080	DIODE,1SS119<NH1M>						

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C321	87-010-404-080		CAP, ELECT 4.7-50V	C736	87-010-401-080		CAP, ELECT 1-50V
C322	87-A10-295-080		CAP,M 0.01-50 J	C737	87-018-134-080		CAPACITOR,TC-U 0.01-16
C323	87-016-280-080		CAP,E 3.3-50 M BP SME	C801	87-010-408-080		CAP,E 47-50 M 11L
C324	87-018-134-080		CAPACITOR,TC-U 0.01-16	C802	87-018-131-080		CAP, CER 1000P-50V
C325	87-018-134-080		CAPACITOR,TC-U 0.01-16	C804	87-A10-474-090		CAP,PP 0.01-1.25K J PHS
C326	87-A10-307-080		CAP,M 0.1-50 J	C805	87-A12-117-010		CAP,CER 560P-1K
C327	87-018-134-080		CAPACITOR,TC-U 0.01-16	C806	87-A12-349-090		CAP,E 470-400 M<NH1M,NH1C1M>
C328	87-010-405-080		CAP, ELECT 10-50V	C806	87-A12-412-090		CAP,E 560-315 M<HT>
C329	87-018-134-080		CAPACITOR,TC-U 0.01-16	C808	87-010-384-080		CAP, ELECT 100-25V
C330	87-010-401-080		CAP, ELECT 1-50V	C809	87-018-127-080		CAP, TC U 470P-50 K B
C331	87-010-544-080		CAP, ELECT 0.1-50V	C810	87-018-130-080		CAP, TC U 820P-50 K B
C332	87-018-134-080		CAPACITOR,TC-U 0.01-16	C814	87-010-260-080		CAP, ELECT 47-25V
C334	87-018-209-080		CAP, CER 0.1-50V	C816	87-010-405-080		CAP, ELECT 10-50V
C335	87-015-997-010		CAP, ELECT 2200UF-16V	C817	87-010-398-090		CAP,E 2200-35V
C336	87-018-134-080		CAPACITOR,TC-U 0.01-16	C818	87-018-209-080		CAP, CER 0.1-50V
C337	87-018-130-080		CAP,TC-U 820P-50 B	C820	87-010-405-080		CAP, ELECT 10-50V
C338	87-010-405-080		CAP, ELECT 10-50V	C821	87-010-405-080		CAP, ELECT 10-50V
C339	87-018-134-080		CAPACITOR,TC-U 0.01-16	C822	87-018-209-080		CAP, CER 0.1-50V
C340	87-018-118-080		CAP,TC-U 82P-50 B	C824	87-010-237-080		CAP, ELECT 1000-16V
C341	87-018-118-080		CAP,TC-U 82P-50 B	C827	87-A12-290-080		CAP,CER 220P-2K
C342	87-018-150-080		CAP,TC-U 18P-50 CH	C829	87-010-384-080		CAP, ELECT 100-25V
C343	87-A10-307-080		CAP,M 0.1-50 J	C831	87-010-405-080		CAP, ELECT 10-50V
C344	87-A10-307-080		CAP,M 0.1-50 J	C834	87-A10-733-090		CAP,E 220-160 SK
C501	87-010-404-080		CAP, ELECT 4.7-50V	C835	87-A12-292-010		CAP,CER 330P-2K
C504	87-010-393-080		CAP, ELECT 100-35V	C838	87-010-397-010		CAP,1000-35
C505	87-018-131-080		CAP, CER 1000P-50V	C844	87-A12-170-010		CAP,CER 1000P-4K
C508	87-010-398-090		CAP,E 2200-35V	C845	87-A12-170-010		CAP,CER 1000P-4K
C509	87-A11-245-080		CAP,M/P 0.1-100 J TF-ECQV	CF201	84-LB3-626-080		FLTR,TPS4.5MB2
C510	87-010-405-080		CAP, ELECT 10-50V	CF202	84-LB3-627-080		FLTR,SFSH 4.5MDB SIF
△ C605	87-A11-336-090		CAP,M/P 0.01-1.6K H ECWH(VB)	CN1	87-009-195-010		CONN,5P B5BEH
△ C607	87-A12-050-090		CAP,M/P 0.013-800 H ECWH(VB)	CN601	87-099-762-010		CONN,5P TBL-P V BOSS
△ C608	87-A10-859-010		CAP,CER 390P-2K K R LONG	CN701	87-A60-628-010		CONN,11P V 2MM JMT
△ C609	87-A11-278-090		CAP,M/P 0.47-250 J ECWF(SR)	CN705	87-009-262-010		CONN,8P 52147 MXJ
C610	87-A10-867-090		CAP,CER 2200P-2K K R	CN706	87-099-186-010		CONN,6P EH V WHT
C611	87-010-963-080		CAP,E 2.2-160 SME	△ CN807	82-481-649-010		CONN,2P V VT-50P
△ C612	87-010-976-080		CAP,CER 1000P-500 B	CNA101	8Z-JE7-660-010		CONN ASSY,1P PS-MAIN
C613	87-016-373-080		CAP,E 10-250	CNA602	8Z-JE7-661-110		CONN ASSY,5P V WHT TV-NK
△ C614	87-010-976-080		CAP,CER 1000P-500 B	CNA603	8Z-JE7-665-010		CONN ASSY,1P FBT-PS
△ C615	87-A10-843-080		CAP,CER 680P-1K K R	CNA704	8A-JE7-617-010		CONN ASSY,6P V WHT TV-NK-2
△ C616	87-A10-843-080		CAP,CER 680P-1K K R	CNA801	8A-JE7-619-010		CONN ASSY,3P V MAIN-PS
C617	87-A12-082-090		CAP,E 1000-35 SMG	CNA803	8A-JE7-618-010		CONN ASSY,2P MAIN-PS
C618	87-A10-301-080		CAP,M 0.033-50 J	D1	87-070-110-010		LED,SLP-181B-51 RED
C619	87-A11-987-080		CAP,CER 6800P-250 K R HR	FB7	87-008-372-080		FLTR, EMI BL01 RN1
C620	87-010-395-080		CAP,E 330-35 SME	FB301	87-003-320-080		F-BEAD,-9.0.FBRO7HA121NB
C621	87-018-131-080		CAP, CER 1000P-50V	FB601	87-003-223-080		FERRITE BEAD BL02RN2
C622	87-A11-124-080		CAP,TC U 2200P-50 K B	FB801	87-003-320-080		F-BEAD,FBR07HA121NB
C623	87-A12-171-080		CAP,E 4.7-50 K SH	FB802	87-003-320-080		F-BEAD,FBR07HA121NB
△ C624	87-010-976-080		CAP,CER 1000P-500 B	FB803	87-003-320-080		F-BEAD,FBR07HA121NB
C626	87-010-401-080		CAP, ELECT 1-50V	FB804	87-003-320-080		F-BEAD,FBR07HA121NB
C627	87-A11-984-080		CAP,CER 270P-500 K B DD10	FB805	87-003-320-080		F-BEAD,FBR07HA121NB
C629	87-A10-469-080		CAP,CER 2200P-500 K B DD10	FB806	87-003-320-080		F-BEAD,FBR07HA121NB
C630	87-010-405-080		CAP, ELECT 10-50V	FB807	87-003-320-080		F-BEAD,FBR07HA121NB
C631	87-010-263-080		CAP, ELECT 100-10V	FR607	87-A00-652-090		RES,FUSE 0.33-1W J RF 1SL12.5
C655	87-A11-354-090		CAP,E 100-160 M SMG	FR608	87-A00-628-090		RES,FUSE 0.68-1W J RF 1SL12.5
C714	87-010-221-080		CAP, ELECT 470-10V	FR610	87-A00-628-090		RES,FUSE 0.68-1W J RF 1SL12.5
C720	87-015-464-080		CAP,E 4.7-16 BP	HL1	84-LB3-216-010		HLDRL,LED
C721	87-A10-292-080		CAP,M 5600P-50 J	J702	87-A60-324-110		JACK,PIN 6P Y-W-R W/SW
C722	87-A10-296-080		CAP,M 0.012-50 J	L2	87-005-614-080		COIL 100UH LAV35 J
C723	87-010-401-080		CAP, ELECT 1-50V	L3	87-005-614-080		COIL 100UH LAV35 J
C724	87-010-404-080		CAP, ELECT 4.7-50V	L101	87-005-614-080		COIL 100UH LAV35 J
C725	87-010-405-080		CAP, ELECT 10-50V	L201	8Z-JBR-612-010		COIL,SIF 4.5MHZ 504BN
C726	87-010-404-080		CAP, ELECT 4.7-50V	L203	87-005-612-080		COIL,68UH J LAV35
C727	87-010-112-080		CAP, ELECT 100-16V	L204	87-003-282-080		COIL,12UH
C728	87-015-464-080		CAP,E 4.7-16 BP	L205	8Z-JBH-610-010		COIL,PIF-SQ57EL349A 45.75MHZ
C729	87-010-404-080		CAP, ELECT 4.7-50V	L206	87-005-614-080		COIL 100UH LAV35 J
C730	87-015-464-080		CAP,E 4.7-16 BP	L207	87-003-147-080		COIL, 22UH
C731	87-A10-288-080		CAP,M 2700P-50 J	L208	87-003-143-080		COIL 4.7 UH
C733	87-016-301-080		CAP,TN 3.3-16K DN	L301	87-003-097-080		COIL,1UH
C734	87-015-464-080		CAP,E 4.7-16 BP	L302	87-005-614-080		COIL 100UH LAV35 J
C735	87-016-302-080		CAP,TN 10-16K DN	L303	87-005-614-080		COIL 100UH LAV35 J

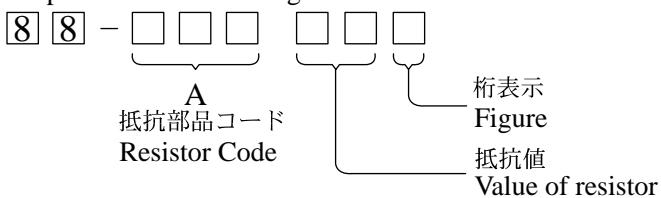
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
L304	87-003-282-080		COIL, 12UH	C417	87-010-404-080		CAP, ELECT 4.7-50V
L603	87-005-757-010		COIL, 3.3MH	C418	87-010-197-080		CAP, CHIP 0.01 DM
L604	87-A50-616-080		COIL, 2.2MH J LHL10	C419	87-010-404-080		CAP, ELECT 4.7-50V
L605	8Z-JE7-608-010		COIL, HLC ZJE-7	C420	87-010-404-080		CAP, ELECT 4.7-50V
L701	87-005-614-080		COIL 100UH LAV35 J	C421	87-010-404-080		CAP, ELECT 4.7-50V
L801	87-A50-636-010		COIL, 390UH RCH110	C422	87-A10-293-080		CAP, M 6800P-50 J
L803	87-A50-176-080		COIL, 33UH-PJ87	C424	87-010-260-080		CAP, ELECT 47-25V
LF803	8A-JE7-643-010		FLTR, LINE ELF18D286B	C425	87-A10-305-080		CAP, M 0.068-50 J
PR601	87-A90-764-080		PROTECTOR, 1.25A 60V491	C426	87-A10-295-080		CAP, M 0.01-50 J
PR801	87-A90-090-080		PROTECTOR, 1.5A 491 SERIES 60V	C427	87-010-404-080		CAP, ELECT 4.7-50V
PR802	87-A90-195-080		PROTECTOR, 7A 491 SERIES 60V	C428	87-010-189-080		C-CAP,S 8200P-50 B
PR803	87-A90-473-080		PROTECTOR, 3.5A 491 SERIES 60V	C429	87-012-365-080		C-CAP,S 0.027-25VBK
PS801	87-A90-717-010		P-COUPLER, PC123FY2	C430	87-010-401-080		CAP, ELECT 1-50V
PT801	8A-JE7-622-010		PT,U SW AJE-7	C431	87-010-189-080		C-CAP,S 8200P-50 B
R315	87-025-380-080		RES,M/F 15K-1/6W F	C432	87-010-197-080		CAP, CHIP 0.01 DM
R316	87-025-427-080		RES,M/F 27K-1/6W F	C433	87-010-260-080		CAP, ELECT 47-25V
R508	87-A00-541-090		RES,M/F 390-1W J RSF(S)	C434	87-012-365-080		C-CAP,S 0.027-25VBK
R604	87-A00-565-090		RES,M/F 1.2K-7W J RSU7	C435	87-010-401-080		CAP, ELECT 1-50V
R612	87-A00-629-090		RES,M/F 5.6-1W J RSF(S)	C436	87-010-401-080		CAP, ELECT 1-50V
R626	87-A00-676-090		RES,M/F 100-7W J RSV7	C437	87-010-401-080		CAP, ELECT 1-50V
R723	87-A00-130-080		RES,M/F 62K-1/6W F	C438	87-010-178-080		CHIP CAP 1000P
R802	87-A00-160-090		RES,M/F 33-2W J RSF(S)	C439	87-A10-307-080		CAP, M 0.1-50 J
R803	87-A00-356-090		RES,M/F 22-2W J RSS2X	C440	87-A10-307-080		CAP, M 0.1-50 J
R804	87-A00-332-090		RES,CEM 1-10W J RGC	C441	87-A10-307-080		CAP, M 0.1-50 J
R805	87-A00-170-090		RES,M/F 82K-3W J RSF(S)	C442	87-010-401-080		CAP, ELECT 1-50V
R806	87-A00-749-090		RES,M/F 33K-5W J RSS5	C443	87-010-405-080		CAP, ELECT 10-50V
R811	87-A00-679-090		RES,CEM 0.15-5W J RGC5	C444	87-010-405-080		CAP, ELECT 10-50V
R824	87-A00-718-090		RES,M/F 680-1W J RSF (S)	C445	87-010-405-080		CAP, ELECT 10-50V
R833	87-A00-199-090		RES,M/F 12K-3W J RSF(S)	C446	87-010-405-080		CAP, ELECT 10-50V
R834	87-A00-223-090		RES,M/F 47K-2W J RSF(S)	C447	87-010-405-080		CAP, ELECT 10-50V
R844	87-A00-254-090		RES,M/F 0.68-2W J	C448	87-010-197-080		CAP, CHIP 0.01 DM
R848	87-A00-332-090		RES,CEM 1-10W J RGC	C449	87-010-402-080		CAP, ELECT 2.2-50V
RY801	87-A91-390-010		RELAY, AC12V G5PA1-8	C450	87-010-247-080		CAP, ELECT 100-50V
S2	87-A91-525-080		SW,TACT SKQNL	C451	87-010-388-080		CAP ELECT 1000-25V SME
S3	87-A91-525-080		SW,TACT SKQNL	C452	87-010-388-080		CAP ELECT 1000-25V SME
S4	87-A91-525-080		SW,TACT SKQNL	C453	87-010-178-080		C-CAP,S 1000P-50 KB
S5	87-A91-525-080		SW,TACT SKQNL	C454	87-010-399-090		CAP,E 3300-35 SME
S6	87-A91-525-080		SW,TACT SKQNL	C455	87-010-393-080		CAP, ELECT 100-35V
S7	87-A91-525-080		SW,TACT SKQNL	C460	87-010-197-080		CAP, CHIP 0.01 DM
S801	87-A91-410-010		SW,AC PUSH 1-1-1 ESB92SH1B	C464	87-010-260-080		CAP, ELECT 47-25V
SFR501	87-024-430-080		SFR, 2.2K RH063EC	C465	87-010-178-080		C-CAP, 1000P-50K
SFR601	87-024-434-080		SFR, 22K RH063EC	C466	87-A10-295-080		CAP, M 0.01-50 J
SFR602	87-024-429-080		SFR, 1K RH063EC	C467	87-010-401-080		CAP, ELECT 1-50V
SFR603	87-A90-385-080		SFR, 22K H DIA6 EVM	C468	87-A10-295-080		CAP, M 0.01-50 J
SWF201	8Z-JBH-633-010		FLTR, SAW M1969-M	C469	87-A10-295-080		CAP, M 0.01-50 J
T601	8Z-JE7-606-010		FBT,D ZJE-7	C470	87-010-154-080		CAP CHIP 10P
T602	85-JT2-653-010		PT,HDT-TV141-2	C471	87-012-155-080		C-CAP 180P-50CH
TH801	87-A91-405-010		POS-THMS,T209-B80-A10	C472	87-A10-295-080		CAP, M 0.01-50 J
TU101	8Z-JBE-610-010		TU UNIT,USA ENV56D74G3	C473	87-A10-295-080		CAP, M 0.01-50 J
X1	87-A70-124-080		VIB,CER 8.0MHZ	C474	87-A10-295-080		CAP, M 0.01-50 J
X301	87-A70-007-080		VIB,XTAL 3.58MHZ AQC-1001	C475	87-010-178-080		C-CAP, 1000P-50K
X302	87-030-327-010		VIB,CER CSB503F30	C476	87-010-260-080		CAP, ELECT 47-25V
AUDIO C.B				C477	87-010-316-080		C-CAP,S 33P-50 CH
C401	87-010-404-080		CAP, ELECT 4.7-50V	C478	87-010-316-080		C-CAP,S 33P-50 CH
C402	87-A10-295-080		CAP, M 0.01-50 J	C479	87-010-318-080		C-CAP,S 47P-50 CH
C403	87-A10-295-080		CAP, M 0.01-50 J				
C404	87-A10-307-080		CAP, M 0.1-50 J				
C405	87-010-404-080		CAP, ELECT 4.7-50V				
C406	87-010-260-080		CAP, ELECT 47-25V				
C407	87-010-197-080		CAP, CHIP 0.01 DM				
C408	87-010-405-080		CAP, ELECT 10-50V				
C409	87-010-404-080		CAP, ELECT 4.7-50V				
C410	87-010-404-080		CAP, ELECT 4.7-50V				
C411	87-010-404-080		CAP, ELECT 4.7-50V				
C413	87-A10-295-080		CAP, M 0.01-50 J				
C414	87-A10-305-080		CAP, M 0.068-50 J				
C415	87-A10-293-080		CAP, M 6800P-50 J				
C416	87-010-260-080		CAP, ELECT 47-25V				
				C493	87-A10-307-080		CAP, M 0.1-50 J
				C494	87-A10-307-080		CAP, M 0.1-50 J
				C495	87-010-400-080		CAP, ELECT 0.47-50V
				C496	87-010-400-080		CAP, ELECT 0.47-50V
				C497	87-010-405-080		CAP, ELECT 10-50V

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C738	87-A10-307-080	CAP, M 0.1-50 J		R881	87-A00-543-080	RES, SD 8.2M 1W J RCR60	
C751	87-010-545-080	CAP, ELECT 0.22-50V					
C752	87-010-402-080	CAP, ELECT 2.2-50V		NK C.B			
C753	87-010-545-080	CAP, ELECT 0.22-50V		C901	87-010-405-080	CAP, ELECT 10-50V	
C754	87-010-402-080	CAP, ELECT 2.2-50V		C902	87-010-968-080	CAP,CER 680P-2K K B	
C755	87-010-197-080	CAP, CHIP 0.01 DM		C903	87-010-405-080	CAP, ELECT 10-50V	
C756	87-010-545-080	CAP, ELECT 0.22-50V		C906	87-010-400-080	CAP, ELECT 0.47-50V	
C757	87-010-402-080	CAP, ELECT 2.2-50V		C907	87-010-235-080	CAP,E 470-16 SME	
C758	87-010-545-080	CAP, ELECT 0.22-50V		C908	87-018-129-080	CAP, CER 680P-50V	
C759	87-010-402-080	CAP, ELECT 2.2-50V		C909	87-018-129-080	CAP, CER 680P-50V	
C760	87-010-197-080	CAP, CHIP 0.01 DM		C910	87-018-129-080	CAP, CER 680P-50V	
C761	87-010-314-080	C-CAP,S 22P-50V		C911	87-018-127-080	CAP, CER 470P-50V	
C762	87-010-314-080	C-CAP,S 22P-50V		C912	87-018-127-080	CAP, CER 470P-50V	
C763	87-010-405-080	CAP, ELECT 10-50V		C913	87-018-127-080	CAP, CER 470P-50V	
C764	87-010-401-080	CAP, ELECT 1-50V		C914	87-A10-052-080	CAP,E 2.2-250	
C765	87-010-382-080	CAP, ELECT 22-25V		C915	87-010-260-080	CAP, ELECT 47-25V	
C766	87-010-402-080	CAP, ELECT 2.2-50V		C916	87-018-134-080	CAPACITOR,TC-U 0.01-16	
C767	87-010-401-080	CAP, ELECT 1-50V		C917	87-010-970-090	CAP,CER 4700P-2K B F	
C768	87-010-402-080	CAP, ELECT 2.2-50V		C918	87-010-381-080	CAP, ELECT 330-16V	
C769	87-010-405-080	CAP, ELECT 10-50V		C919	87-010-405-080	CAP, ELECT 10-50V	
C770	87-010-405-080	CAP, ELECT 10-50V		C920	87-010-405-080	CAP, ELECT 10-50V	
C780	87-010-405-080	CAP, ELECT 10-50V		C921	87-A10-050-010	CAP,CER 4700P-500	
C781	87-010-405-080	CAP, ELECT 10-50V		C922	87-010-221-080	CAP, ELECT 470-10V	
CN401	87-009-314-010	CONN 8P 51048		C923	87-A12-168-080	CAP,E 33-160 M SMG	
CN404	87-049-469-010	CONN,4P V		C924	87-A12-010-080	CAP,M/P 0.047-250 J ECQE2	
CN405	87-009-317-010	CONN,11P 51048		C925	87-A10-283-080	CAP,M 1000P-50 J	
CN409	87-009-033-010	CONNECTOR, 5P		C926	87-A10-283-080	CAP,M 1000P-50 J	
CNA402	8A-JE7-610-010	CONN ASSY,6P V WHT AU-MAIN		C927	87-010-963-080	CAP,E 2.2-160 SME	
CNA403	8A-JE7-611-010	CONN ASSY,11P V WHT AU-VD		C928	87-A12-014-080	CAP,M/P 0.1-250 J ECQE2	
CNA408	8Z-JE7-663-010	CONN ASSY,2P COMB-NK		C929	87-A10-303-080	CAP,M 0.047-50 J	
DL401	87-A91-598-010	DELAY LINE,350NS EQFK5-MT		C930	87-010-221-080	CAP, ELECT 470-10V	
FR401	87-A00-478-090	RES,FUSE 2.2-1W J		C931	87-010-970-090	CAP,M/P 0.047-250 J ECQE2	
FR402	87-A00-478-090	RES,FUSE 2.2-1W J		C932	87-010-221-080	CAP, ELECT 470-10V	
J401	87-A60-420-010	JACK, 3.5 ST (MSC)		C933	87-009-034-010	CONN,6P PH V	
J402	87-A60-875-010	JACK,PIN 3P +S YKC22-0477		C934	87-009-195-010	CONN,5P B5BEH	
L401	87-005-614-080	COIL 100UH LAV35 J		C935	87-A61-126-080	MALE, 1P TP42097	
L403	87-005-614-080	COIL 100UH LAV35 J		C936	87-A61-060-080	CONN,1P V RED TP00706	
L404	87-005-614-080	COIL 100UH LAV35 J		C937	87-009-030-010	CONNECTOR 2P PH M	
L405	87-003-284-080	COIL,27UH LAL02		C938	87-099-043-010	CONN 2P EH	
L406	87-003-284-080	COIL,27UH LAL02		C939	87-005-614-080	COIL 100UH LAV35 J	
L407	87-A50-555-010	COIL,100UH K 7212M-101K		C940	87-005-614-080	COIL 100UH LAV35 J	
R432	87-A00-728-090	RES,M/F 2.2-7W K RSV7		C941	87-005-614-080	COIL 100UH LAV35 J	
R447	87-A00-667-090	RES,M/F 680-2W J RSF(S)		C942	87-005-482-080	COIL,56UH FLR50 J	
R448	87-A00-667-090	RES,M/F 680-2W J RSF(S)		C943	87-005-481-080	COIL,47UH J FLR50	
W401	8A-JE7-612-010	F-CABLE,8P 2.0 70MM		C944	87-A00-242-090	RES,M/F 8.2K-3W J RS	
W405	8A-JE7-613-010	F-CABLE,11P 2.0 70MM		C945	87-A00-242-090	RES,M/F 8.2K-3W J RS	
PS C.B				C946	87-022-382-090	RES,M/O 120-2W J	
				C947	87-A00-638-080	RES,M/F 47-1/2W J SPR	
△ C881	87-A11-353-010	CAP,M/P 0.22-275 M		C948	87-A00-634-080	RES,M/F 2.7-1/4W J SPR	
△ C882	87-A12-170-010	CAP,CER 1000P-4K		C949	87-A00-636-080	RES,M/F 560-1/4W J SPR	
△ C883	87-A11-353-010	CAP,M/P 0.22-275 M		C950	87-A00-637-080	RES,M/F 1K-1/4W J SPR	
△ C885	87-A12-170-010	CAP,CER 1000P-4K		C951	87-022-556-090	RES,M/O 180-3W J	
C887	87-A12-347-080	CAP ELECT 560-50 M LXV		C952	87-A00-636-080	RES,M/F 560-1/4W J SPR	
CN881	87-A61-299-010	CONN,4P B 5-VB		C953	87-A00-634-080	RES,M/F 2.7-1/4W J SPR	
△ CN882	87-099-674-010	CONN,2P VA V		C954	87-A00-635-080	RES,M/F 47-1/4W J SPR	
CN883	87-A61-126-080	MALE, 1P TP42097		S0901	8A-JE7-670-010	SOCKET,CRT 11P HPS1521-013411	
CN884	87-A60-937-010	CONN,2P V VH					
CN885	87-A61-126-080	MALE, 1P TP42097					
△ D881	87-A90-965-010	VR1S,TNR15G471K<NH1M,NH1C1M>		S-JACK C.B			
△ D881	87-A90-966-010	VR1S,TNR15G221K<HT>		C771	87-010-322-080	C-CAP,S 100P-50 CH	
△ F881	87-035-459-010	FUSE, 5A 250V		C772	87-010-197-080	CAP, CHIP 0.01 DM	
△ FC881	87-033-213-080	CLAMP, FUSE		CNA771	8Z-JE5-631-010	CONN ASSY,5P S-JK	
△ FC882	87-033-213-080	CLAMP, FUSE		J771	87-A61-174-010	JACK,Y/CYKF51-5558	
△ LF881	8A-JE7-642-010	FLTR,LINE ELF18D293M<NH1M,NH1C1M>					
△ LF881	87-A91-804-010	FLTR,LINE PLH10A1612R1P02B1<HT>					
△ LF882	8A-JE7-642-010	FLTR,LINE ELF18D293M<NH1M,NH1C1M>					
△ LF882	87-A91-634-010	FLTR,LINE ELF18D450K<HT>					
△ PT881	8A-JE7-624-010	PT,NH ZTP3446(STBY)					

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち

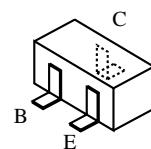
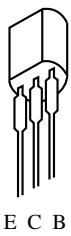
Chip Resistor Part Coding



チップ抵抗 Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm)			抵抗コード Resistor Code : A	
				外形／Form	L	W		
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

TRANSISTOR ILLUSTRATION

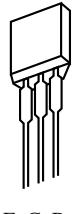
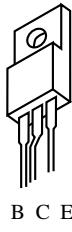


2SA1091-O
2SC1815
2SC2482

2SC5147D

2SA1837
2SC4793
2SD2531

2SA1037
2SC2412K
KRC104S



2SA1015Y
2SC2925-T

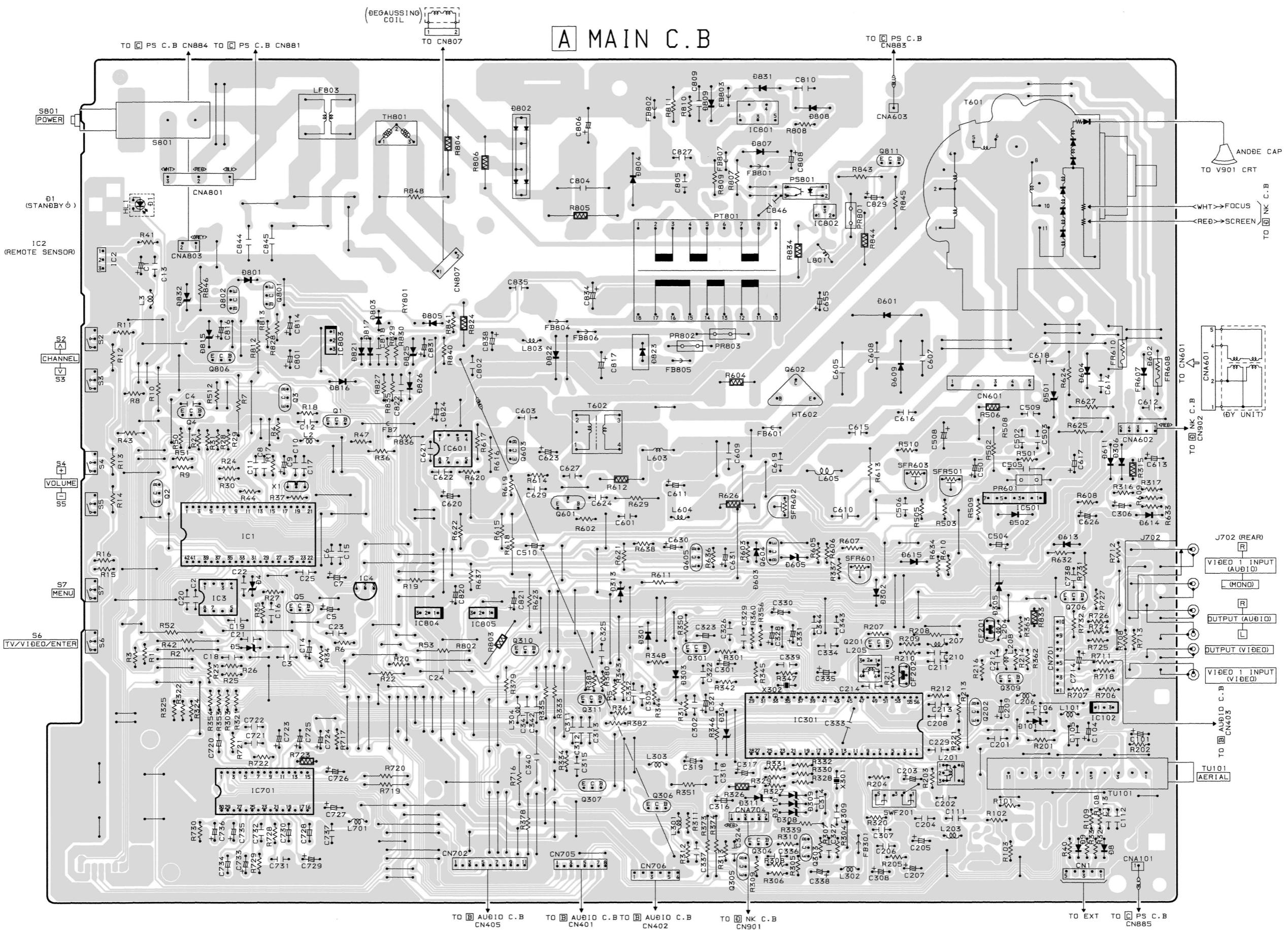
2SD2578-CA

2SA933S
2SA933AS(R)
2SA1175FE
2SC1740SRS
2SC2785FE

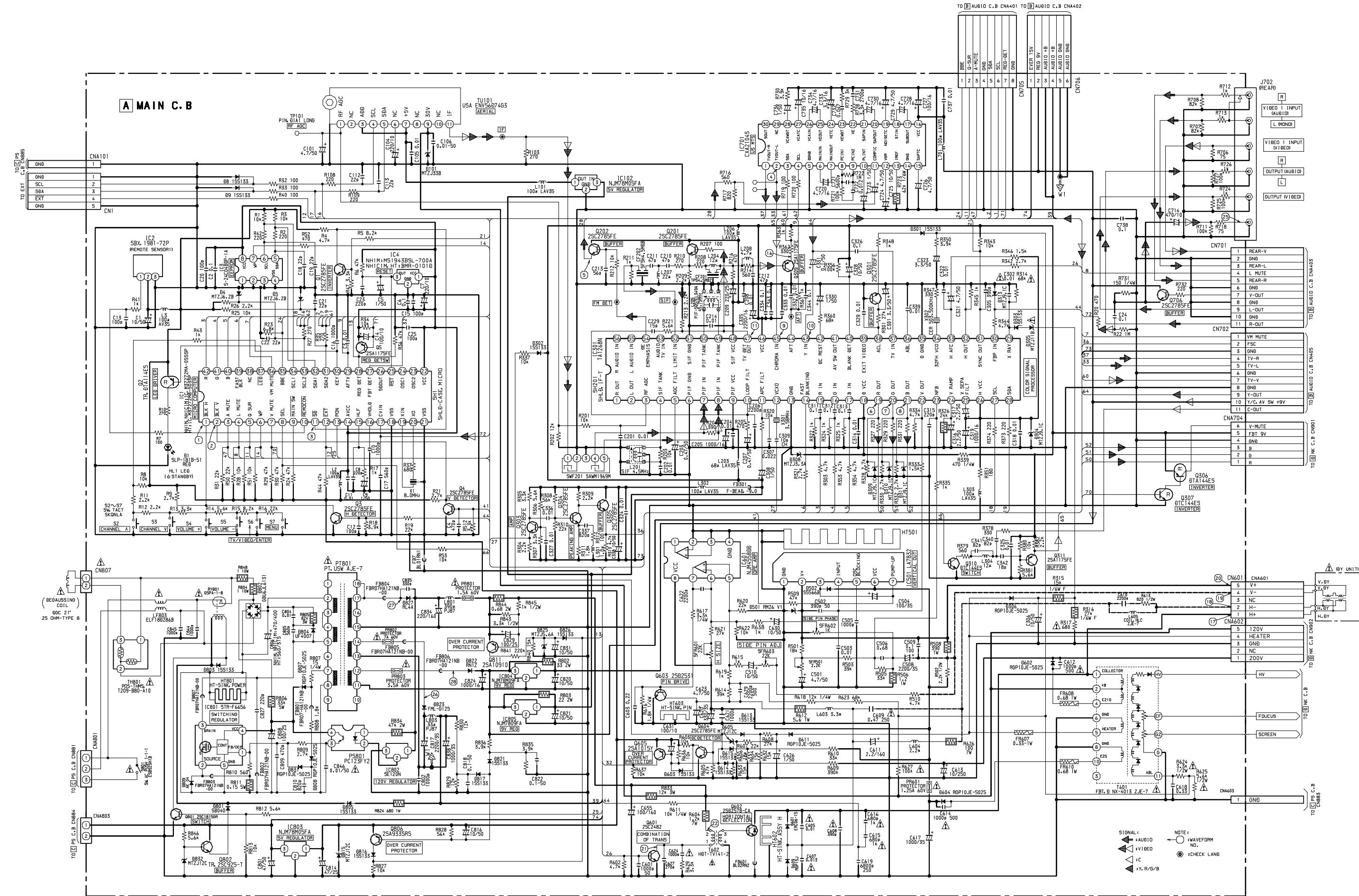
2SD774
DTA114ES
DTA144ES
DTC144ES

WIRING – 1 (MAIN)

| 32 | 31 | 30 | 29 | 28 | 27 | 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

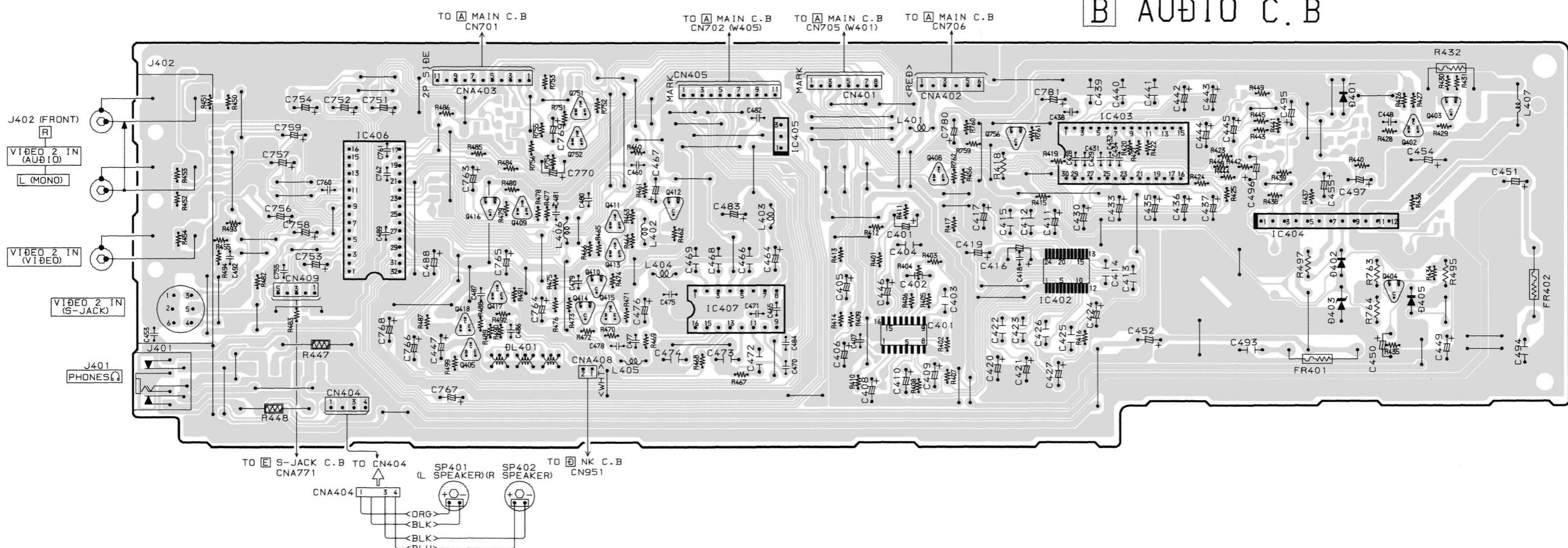


SCHEMATIC DIAGRAM – 1 (MAIN)

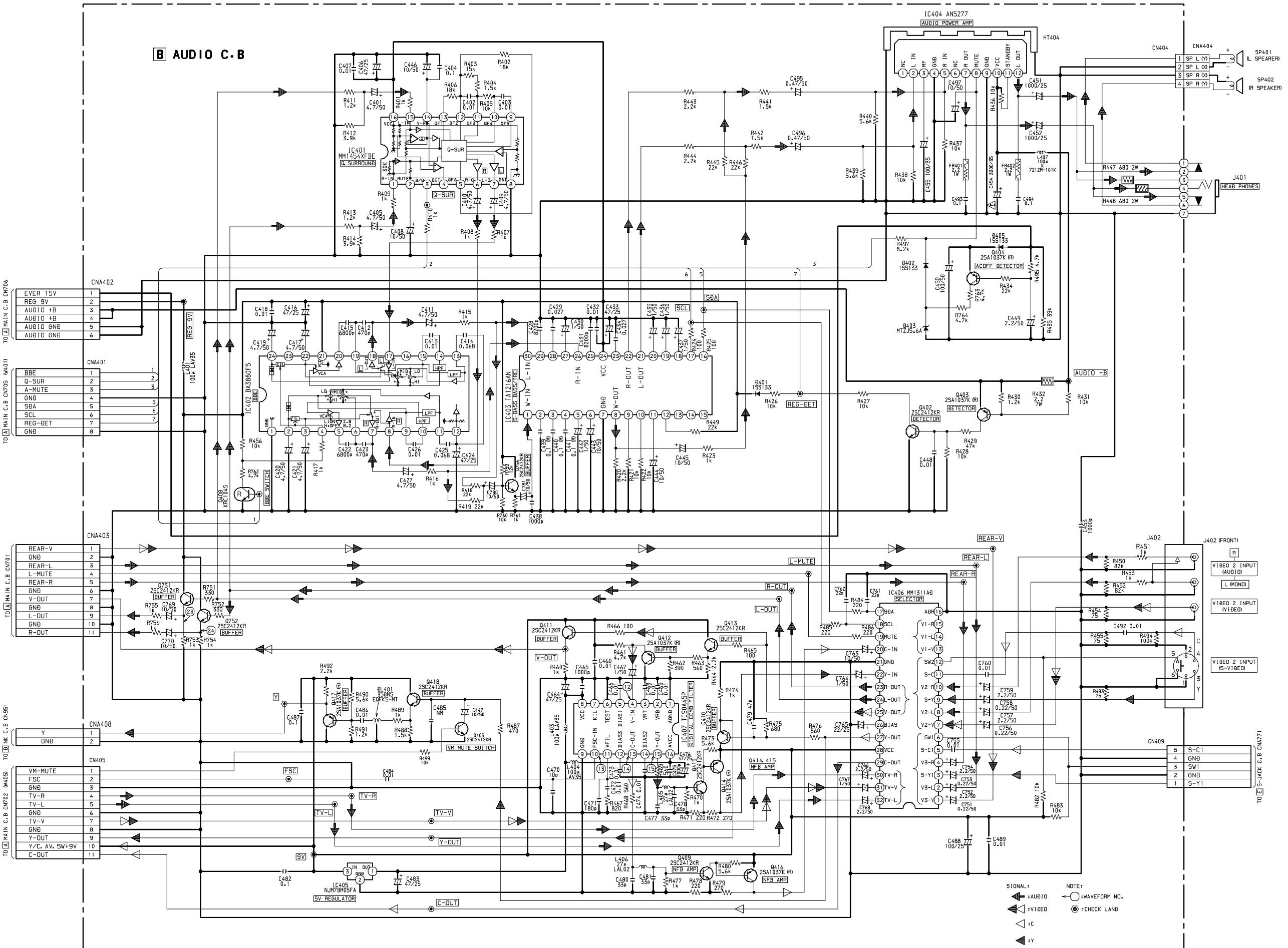


| 32 | 31 | 30 | 29 | 28 | 27 | 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

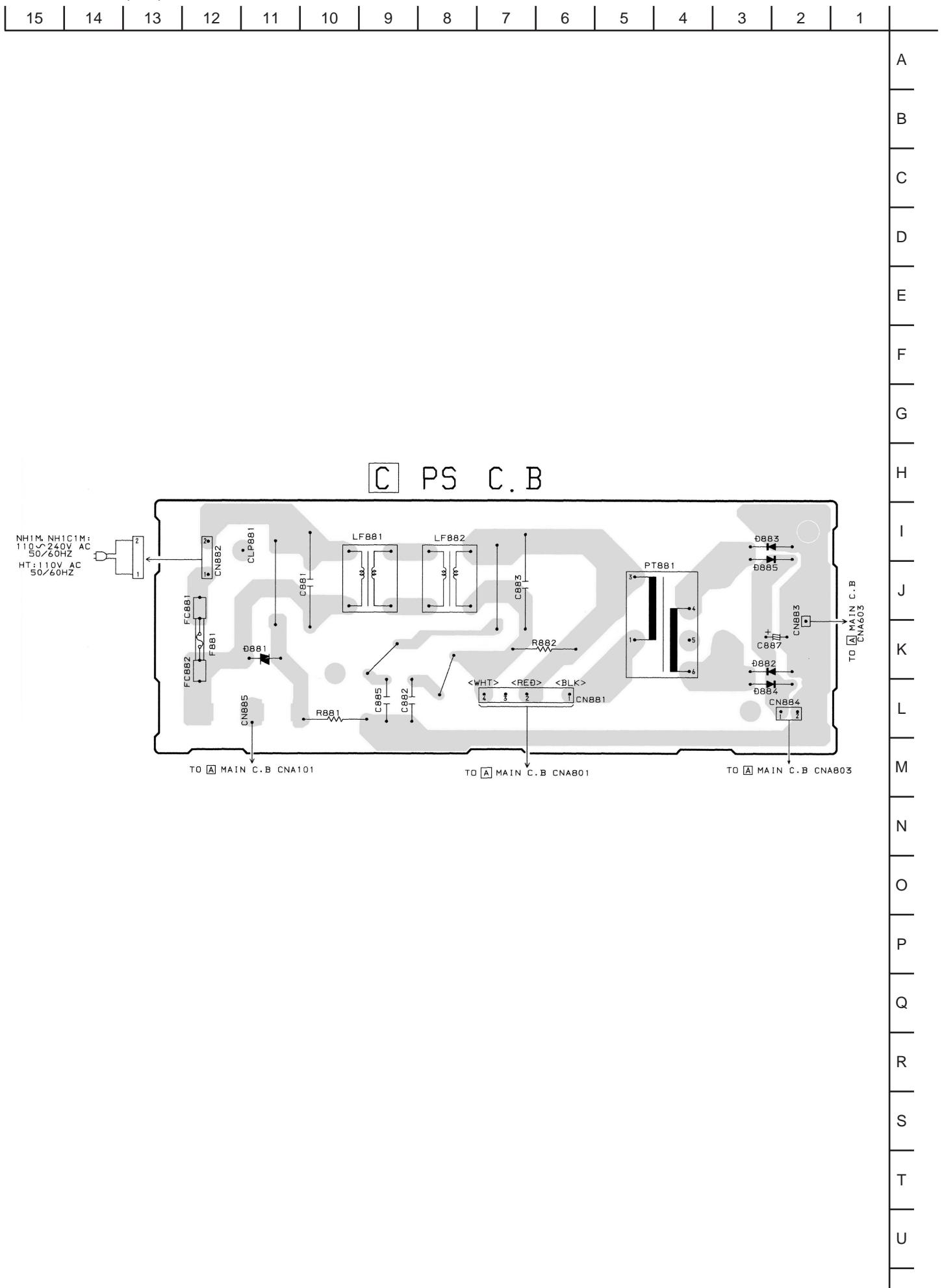
B AUDIO C.B



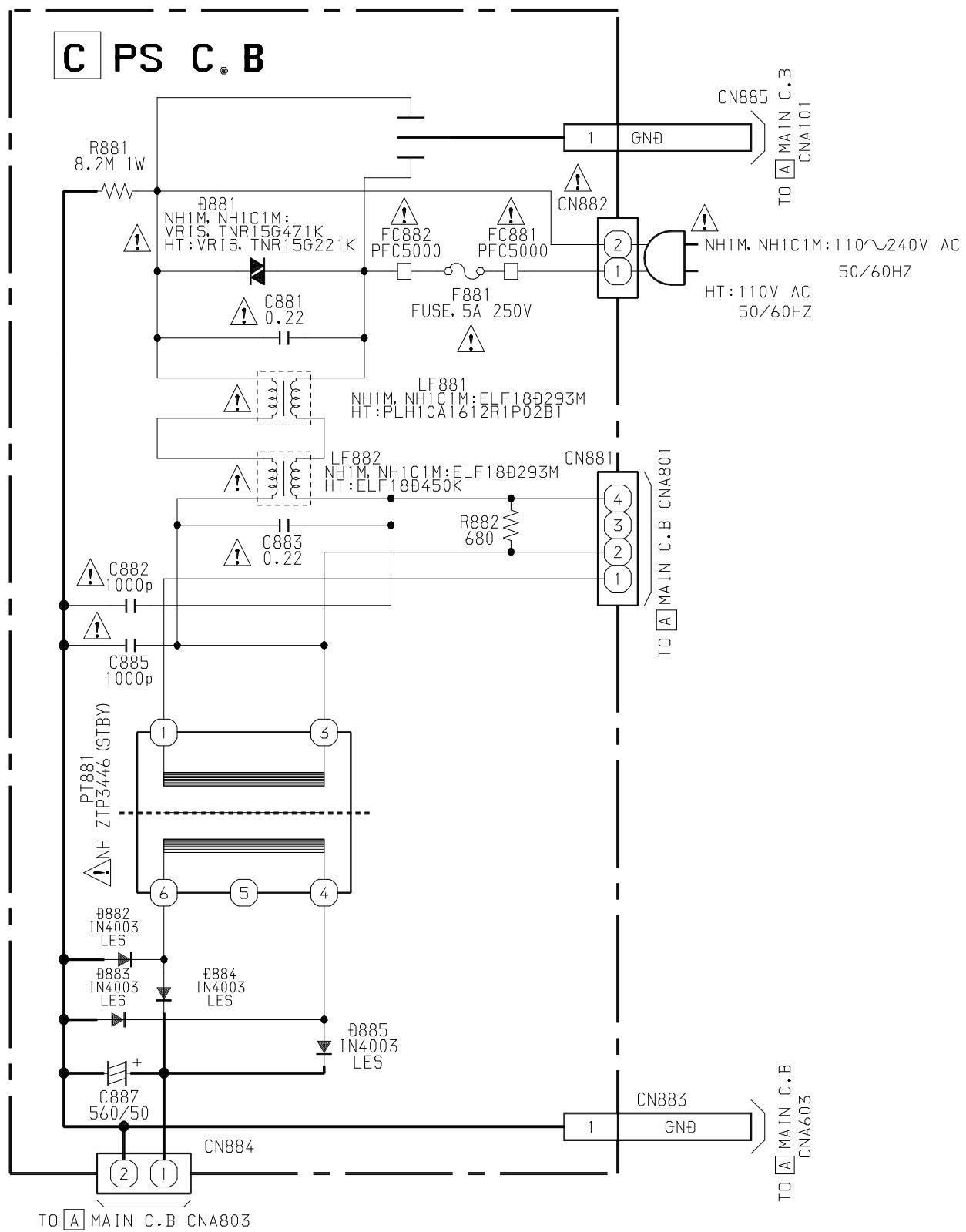
SCHEMATIC DIAGRAM – 2 (AUDIO)



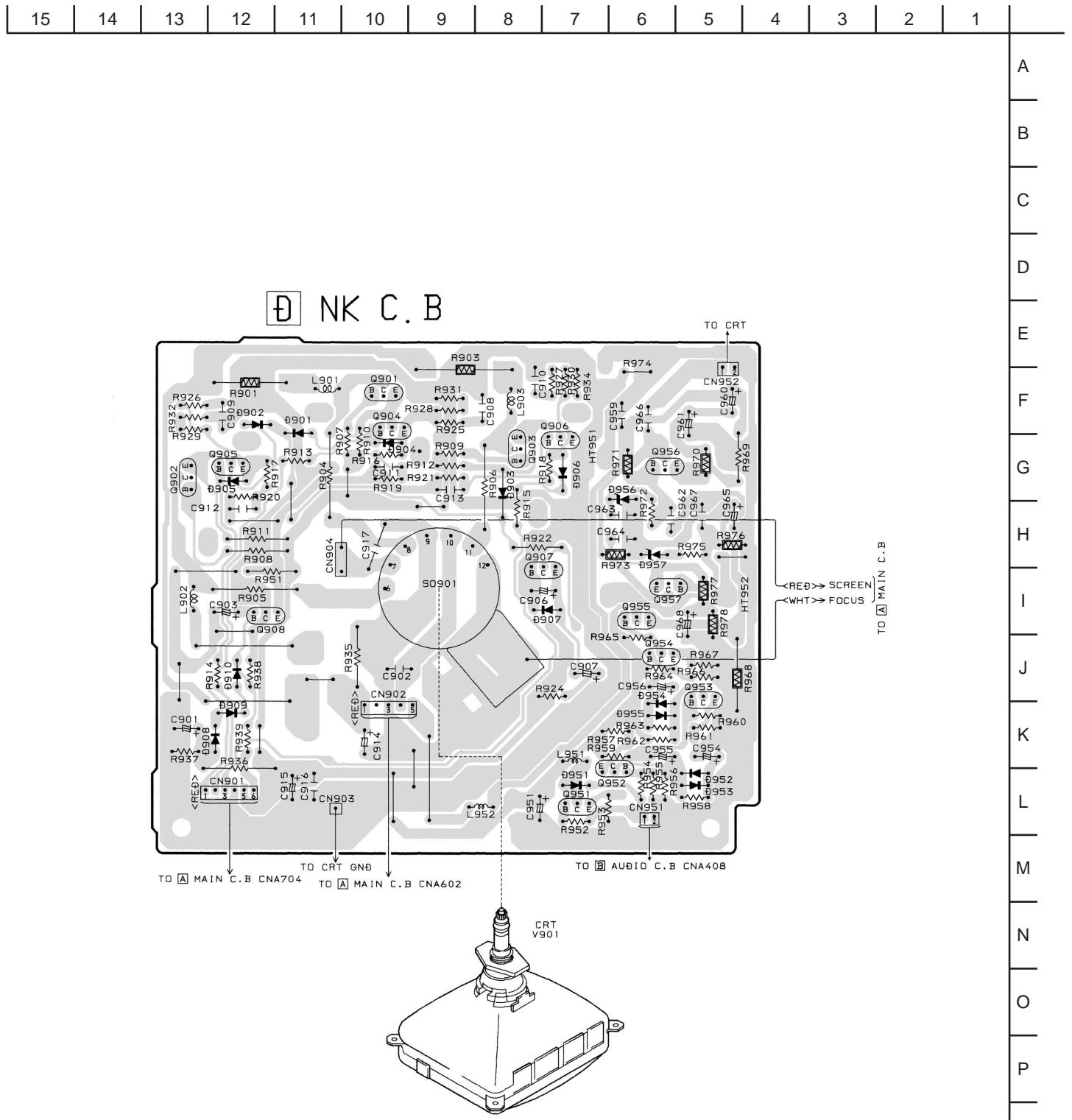
WIRING – 3 (PS)



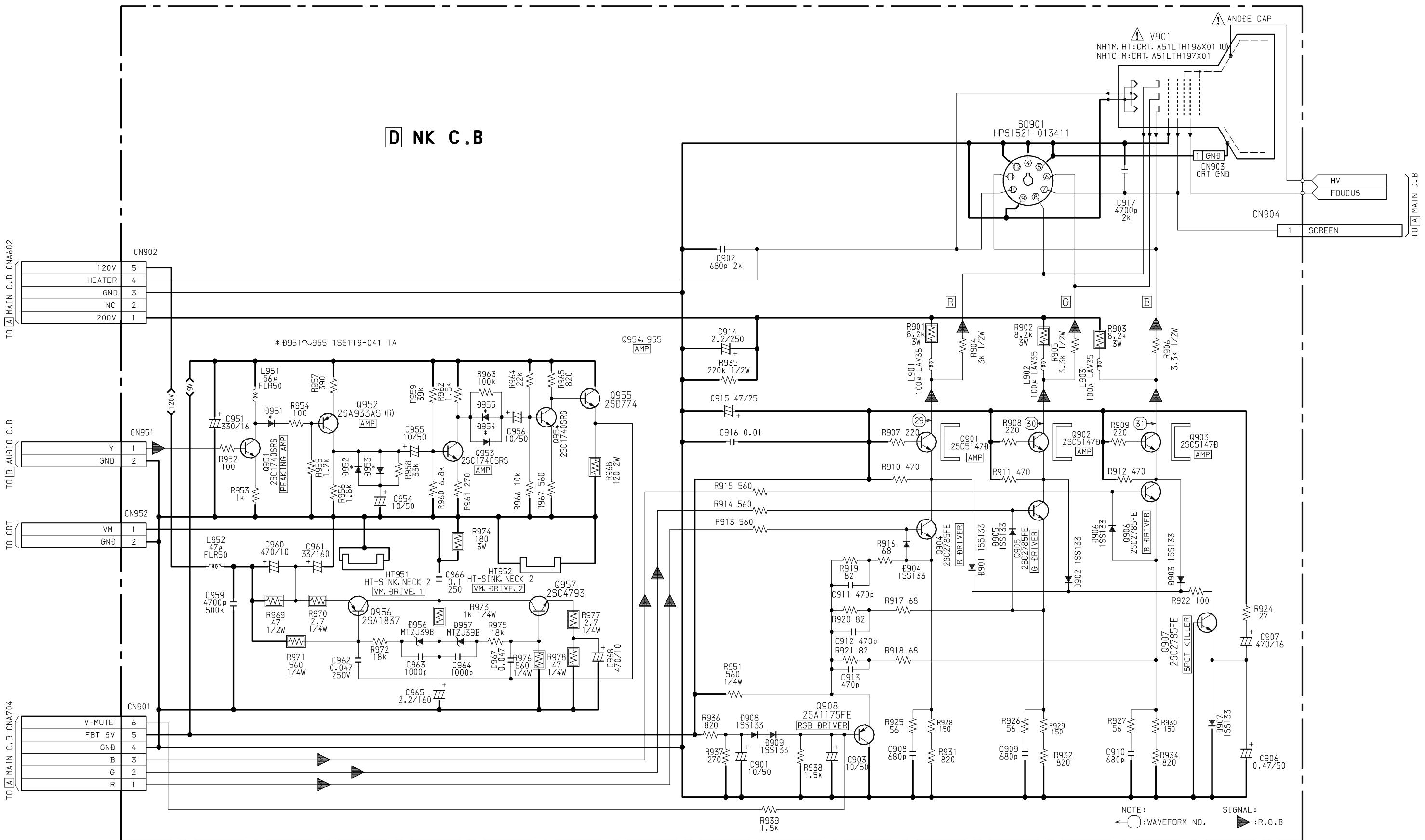
SCHEMATIC DIAGRAM – 3 (PS)



WIRING – 4 (NK)



SCHEMATIC DIAGRAM – 4 (NK)

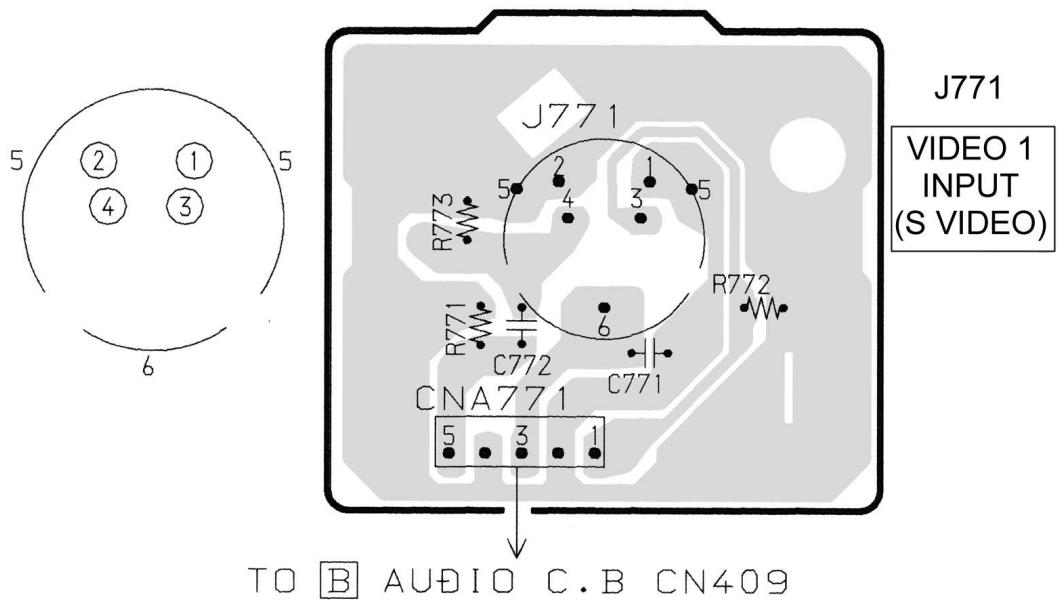


WIRING – 5 (S-JACK)

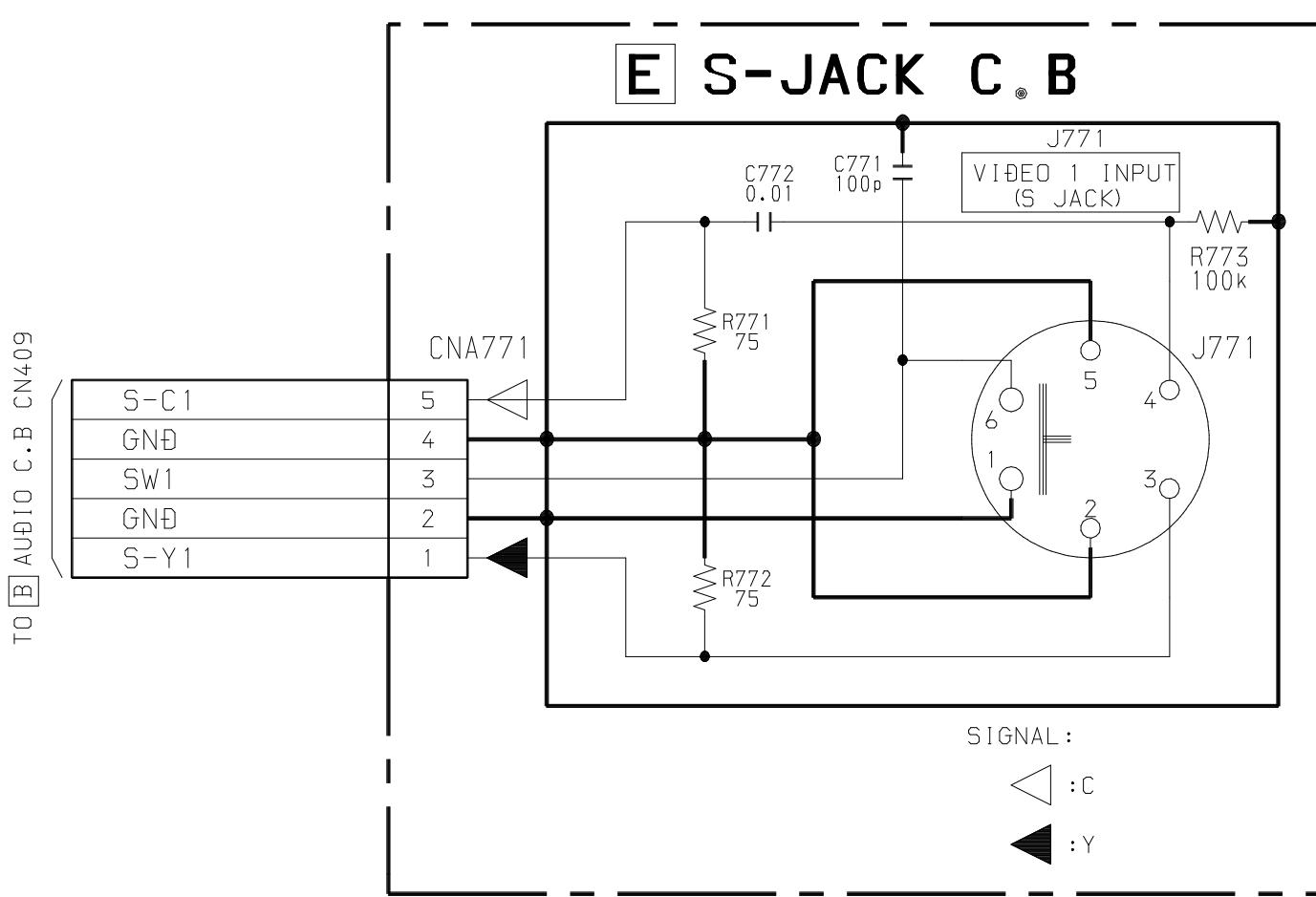
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
----	----	----	----	----	----	---	---	---	---	---	---	---	---	---

A
B
C
D
E
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H
I
J
K
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U

E S-JACK C. B

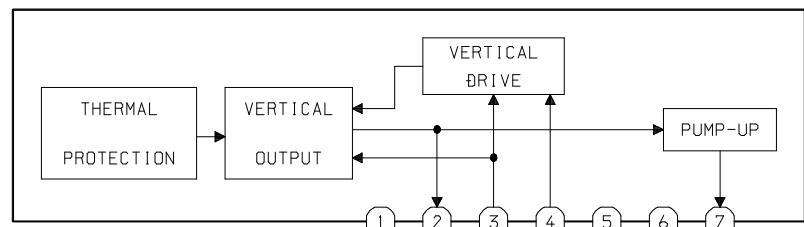


SCHEMATIC DIAGRAM – 5 (S-JACK)

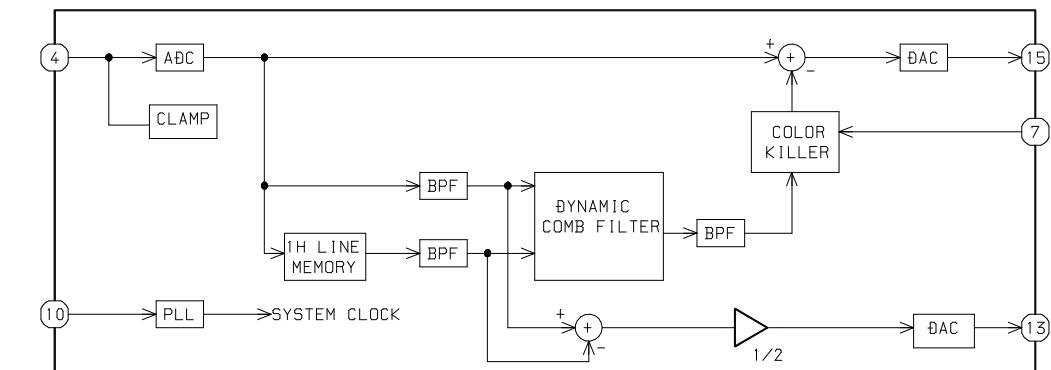


IC BLOCK DIAGRAM

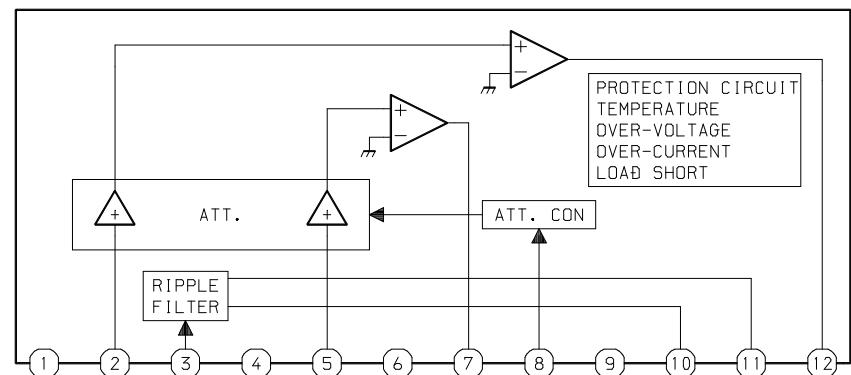
IC, LA7832



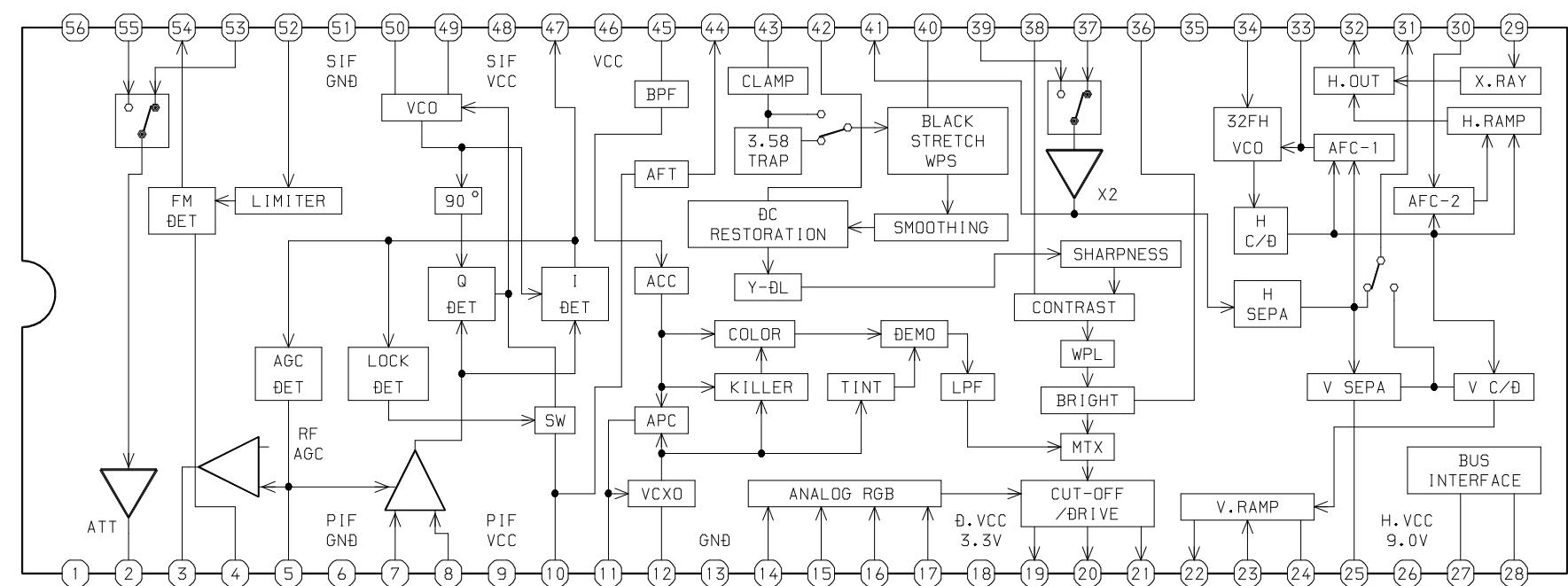
IC, TC90A45P



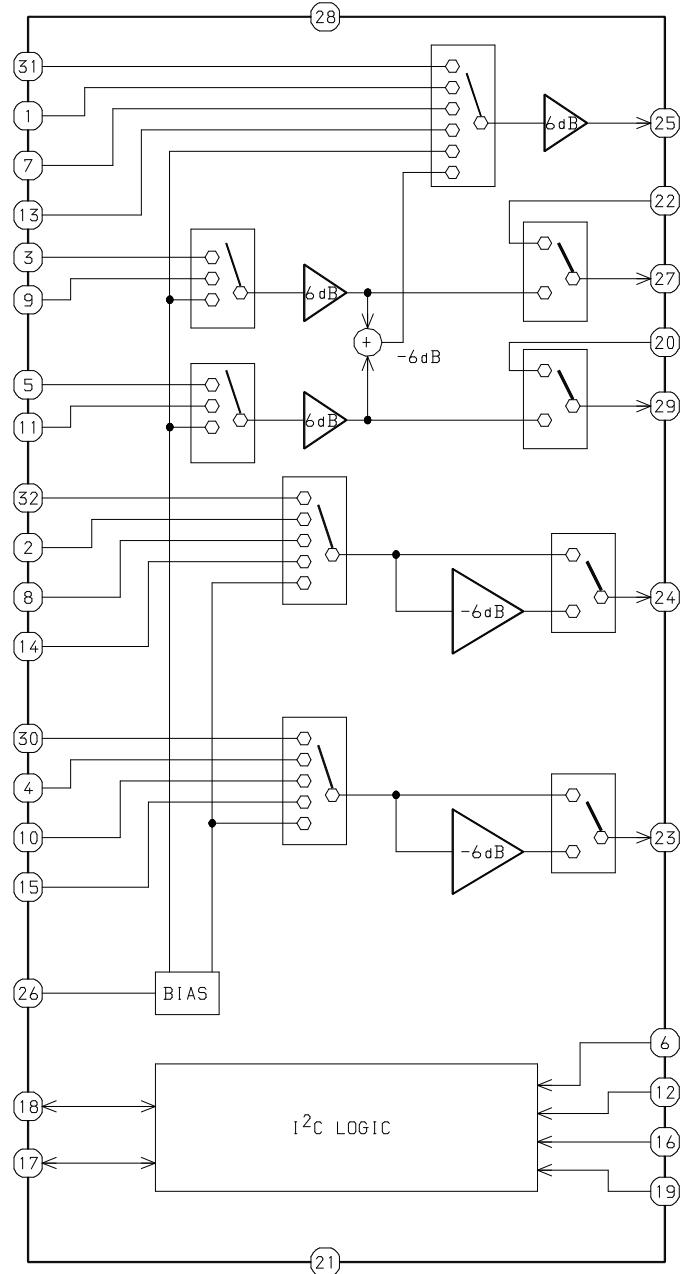
IC, AN5277



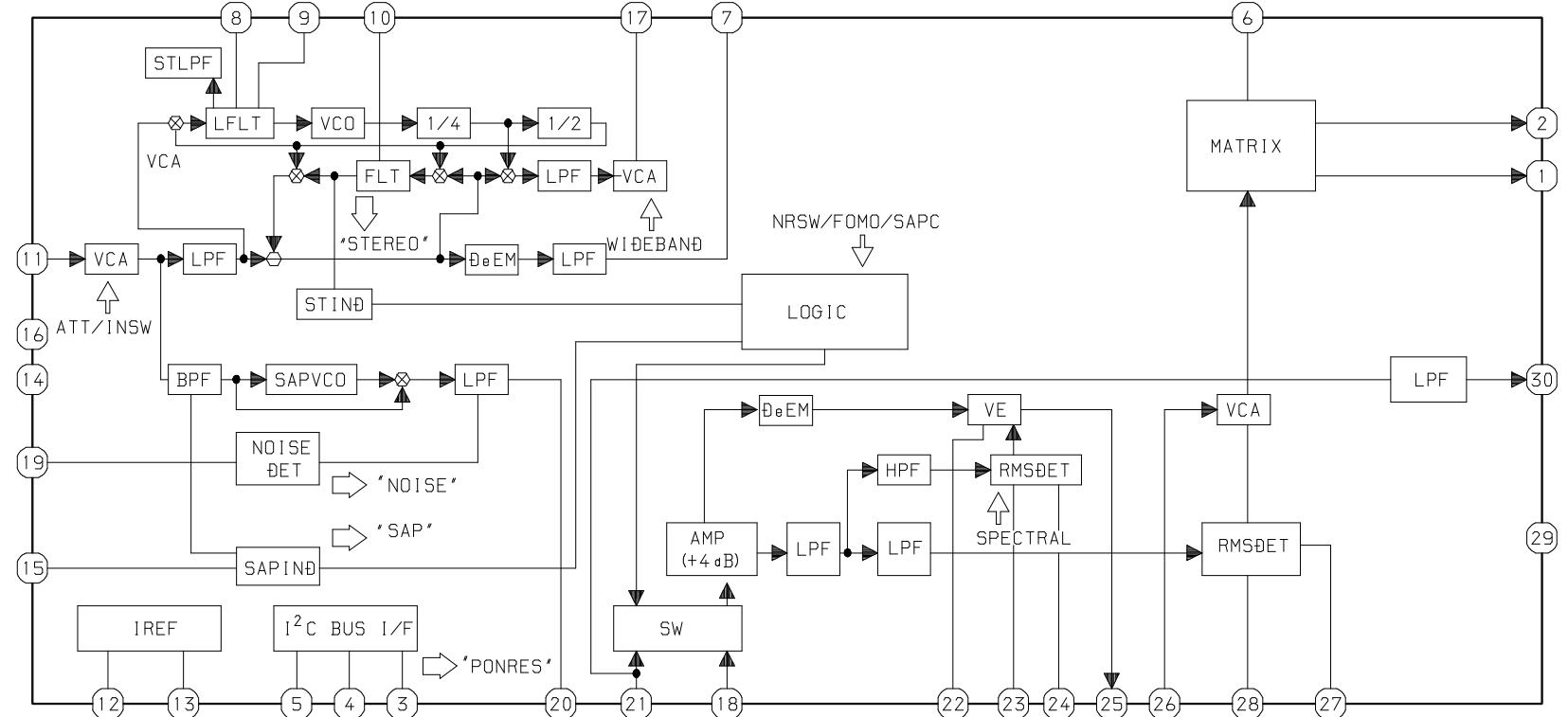
IC, TA1268N



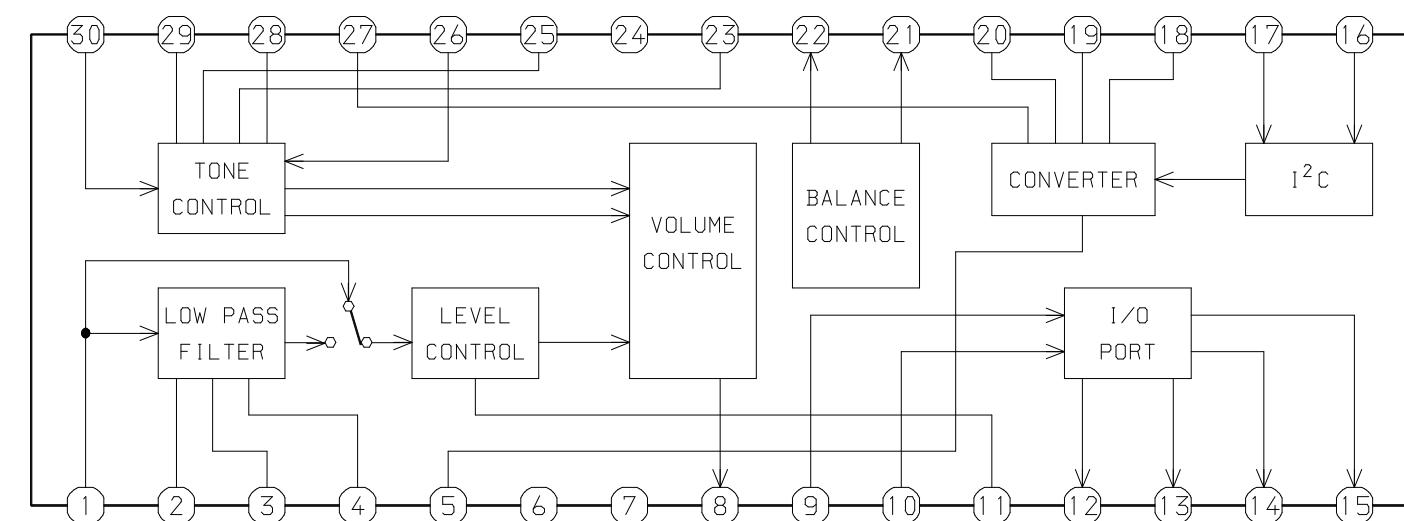
IC, MM1311AD



IC, CXA2104S



IC, TA1216AN



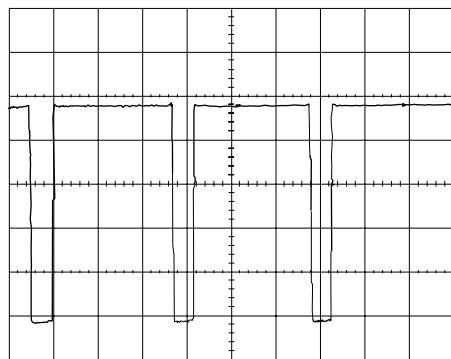
IC DESCRIPTION

IC, M37272MA-055SP<NH1M,NH1C1M>, IC, M37272M8-503SP<HT1M>

Pin No.	Pin Name	I/O	Description
1	<u>BLK H</u>	I	Blanking H sync input.
2	<u>BLK V</u>	I	Blanking V sync input.
3	A MUTE	O	Audio Amp mute.
4	L MUTE	O	Audio mute.
5	Q SUR	O	Q surround switch.
6	WP	O	EEPROM Write protect.
7	V MUTE	O	Video mute
8	SEL	O	BPF switch.
9	<u>MAIN SW</u>	-	Not used.
10	<u>REMOCON</u>	I	Remote control signal input.
11	<u>SD</u>	I	Pluse check.
12	<u>EXT</u>	I	I ² C switch.
13	PON	O	Power switch.
14	AVCC	-	VCC.
15	HLF	-	Filter Connection Terminal.
16	VHOLD	-	Condenser Connection Terminal.
17	CV IN	I	Complex video signal input
18	VSS	-	GND.
19	XIN	I	Main Clock (8 MHz).
20	XO	O	Main Clock (8 MHz).
21	VSS	-	GND.
22	VCC	-	VCC.
23	OSC2	-	Not used.
24	OSC1	-	Not used.
25	<u>RST</u>	I	Reset input.
26	SDOUT	O	Not used.
27	FBT DET	O	FBT detection (over 2.5V).
28	REG DET	I	REG detection (over 2.5V).
29	AFTV	I	AFT voltage input.
30	KEY	I	Key input.
31	SDA2	I	I ² C bus CH2 data (Reg IC).
32	SDA1	I	I ² C bus CH1 data (EEPROM).
33	SCL2	I	I ² C bus CH2 data (Reg IC).
34	SCL1	I	I ² C bus CH1 data (EEPROM).
35	BBE	O	BBE switch.
36	VM MUTE	O	VM mute.
37	<u>LED</u>	O	Power LED switch.
38	NC	-	Not connected.
39	FAST BLK	O	OSD Blanking.
40	B	O	OSD B output.
41	G	O	OSD G output.
42	R	O	OSD R output.

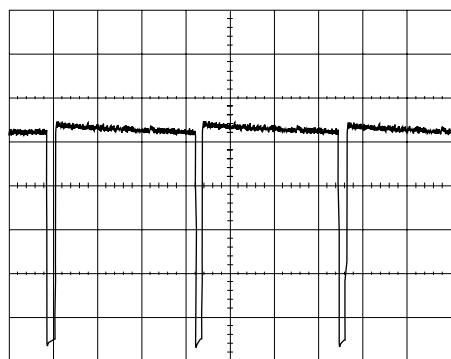
WAVEFORM

① IC1 PIN 1 (BLK H)



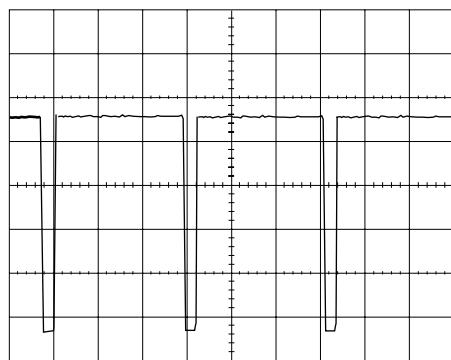
1 V/div
20 µs/div

② IC1 PIN 2 (BLK V)



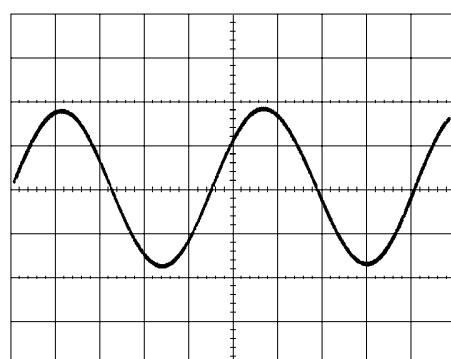
1 V/div
5 ms/div

③ IC1 PIN 11 (\overline{SD})



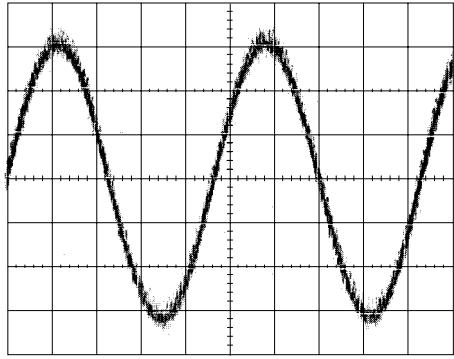
1 V/div
20 µs/div

④ IC701 PIN 2 (TVOUT-L)



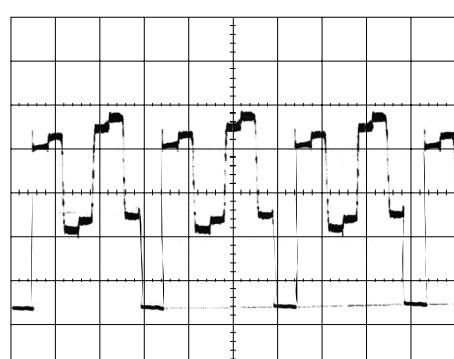
0.1 V/div
0.2 ms/div

⑤ Q202 Emitter



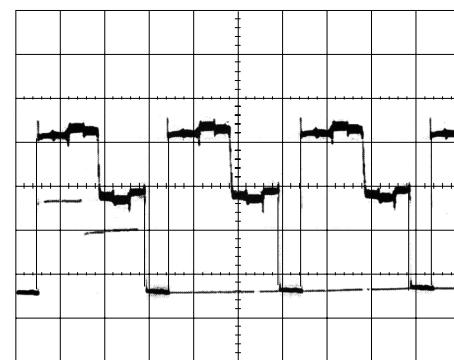
0.1 V/div
0.2 ms/div

⑥ IC301 PIN 19 (R OUT)



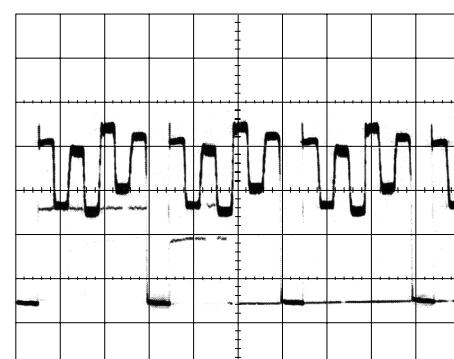
1 V/div
20 µs/div

⑦ IC301 PIN 20 (G OUT)



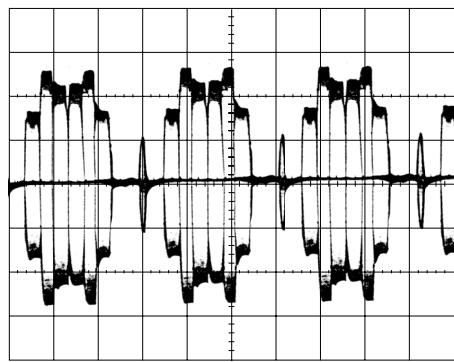
1 V/div
20 µs/div

⑧ IC301 PIN 21 (B OUT)



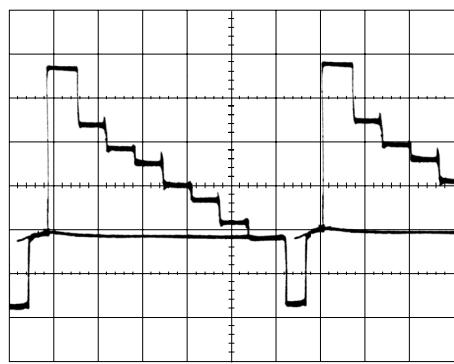
1 V/div
20 µs/div

⑨ IC301 PIN 45 (CHROMA IN)



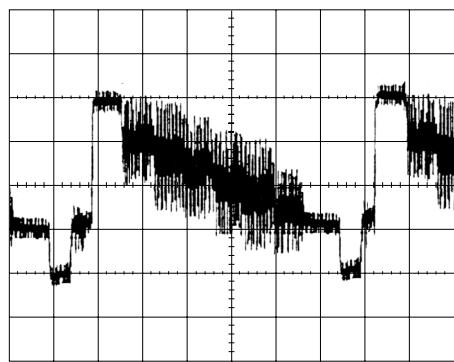
0.1 V/div
20 μs/div

⑩ IC301 PIN 43 (Y IN)



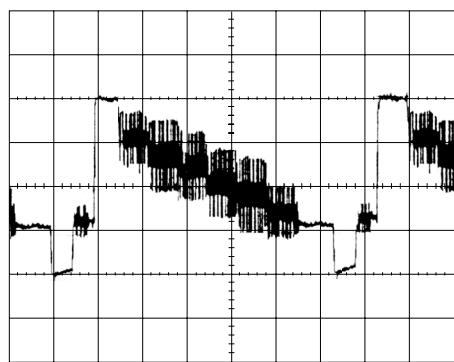
0.2 V/div
10 μs/div

⑪ IC301 PIN 47 (TV DET OUT)



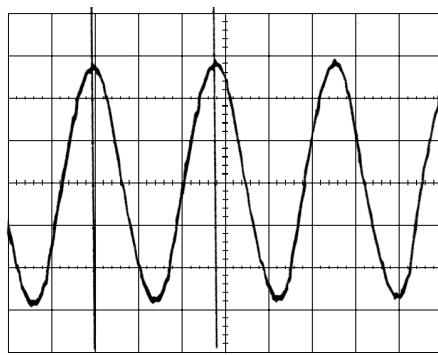
0.5 V/div
10 μs/div

⑫ IC407 PIN 4 (V-IN)



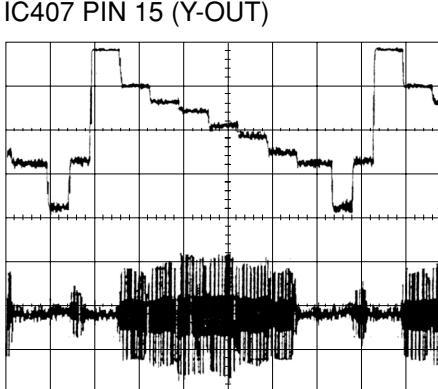
0.2 V/div
10 μs/div

⑬ IC407 PIN 10 (FSC-IN)



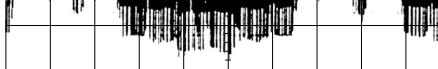
0.2 V/div
0.1 μs/div

⑭ IC407 PIN 13 (C-OUT)



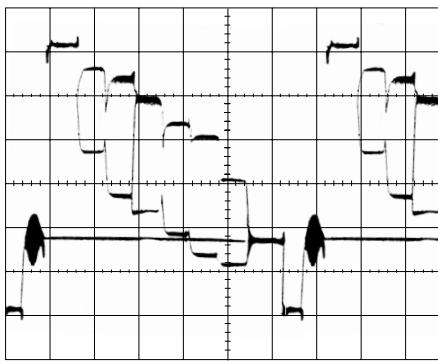
0.5 V/div
10 μs/div

⑮ IC407 PIN 15 (Y-OUT)



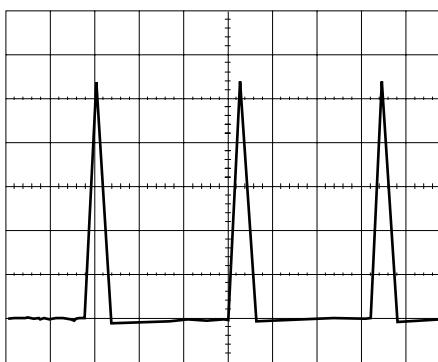
0.2 V/div
10 μs/div

⑯ Q309 Emitter



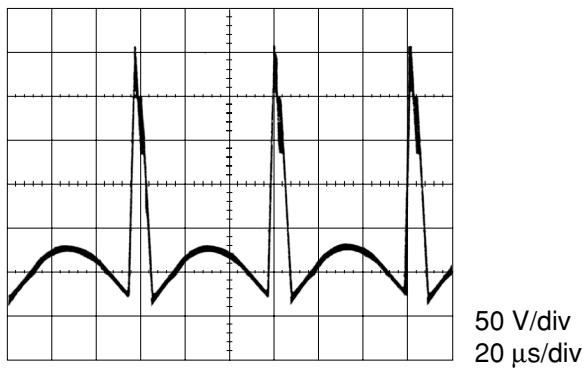
0.2 V/div
10 μs/div

⑰ CN601 PIN 1 (H+)

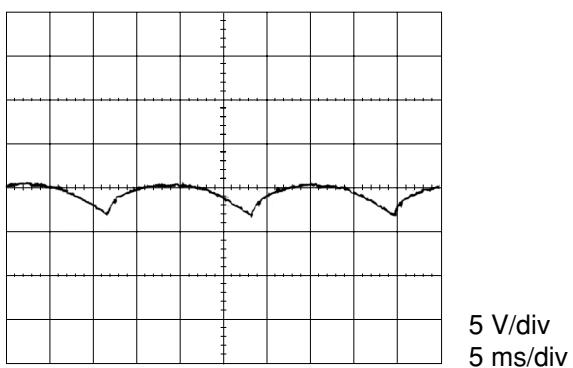


200 V/div
20 μs/div

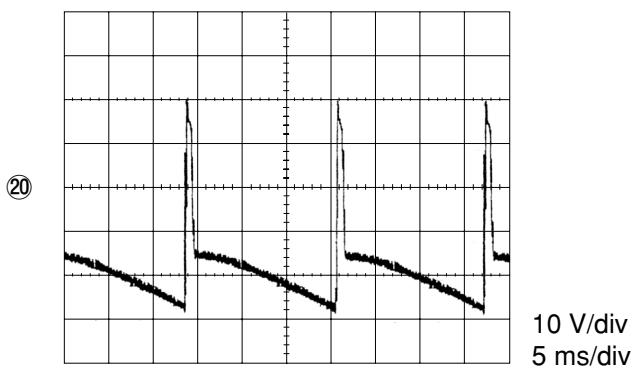
⑯ CN601 PIN 2 (H-)



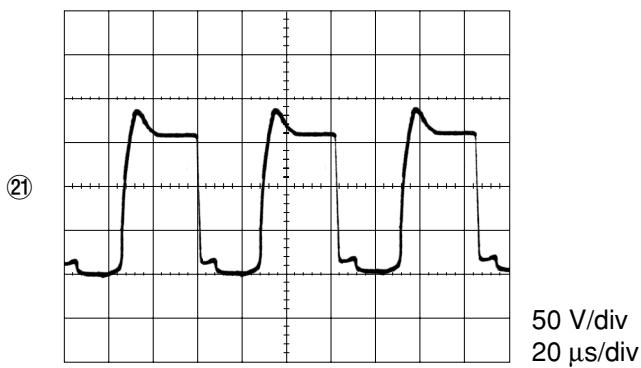
⑯ CN601 PIN 4 (V-)



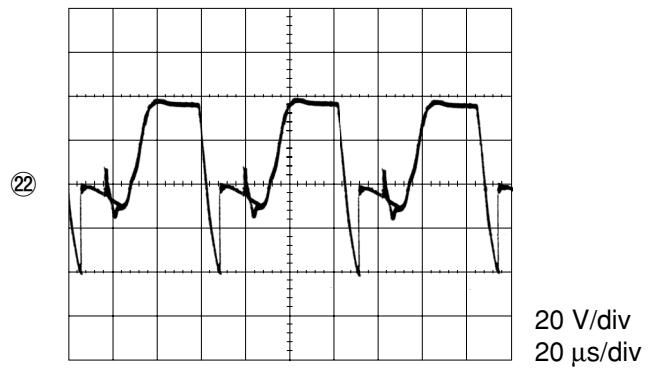
⑯ CN601 PIN 5 (V+)



㉑ Q601 COLLECTOR

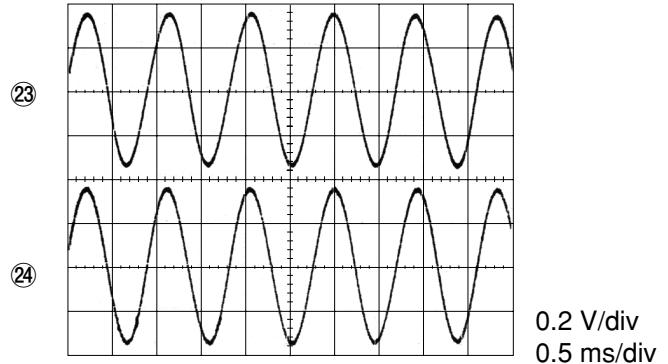


㉒ T602 PIN 3

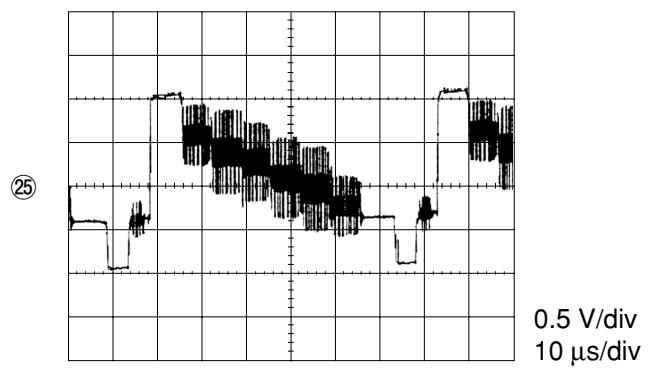


㉓ Q751 (EMITTER)

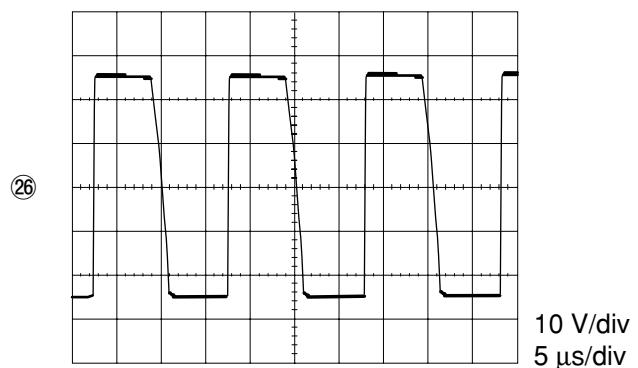
㉔ Q752 (EMITTER)



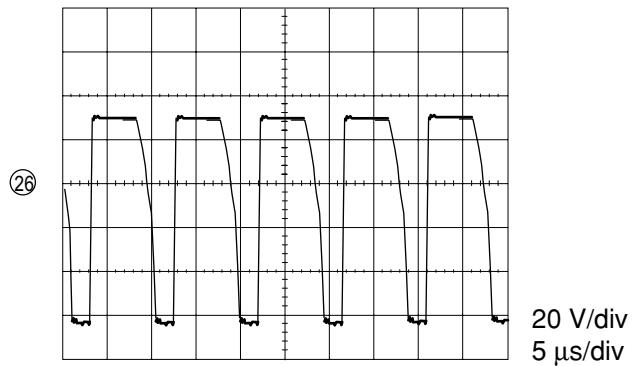
㉕ J702 (VIDEO OUTPUT)



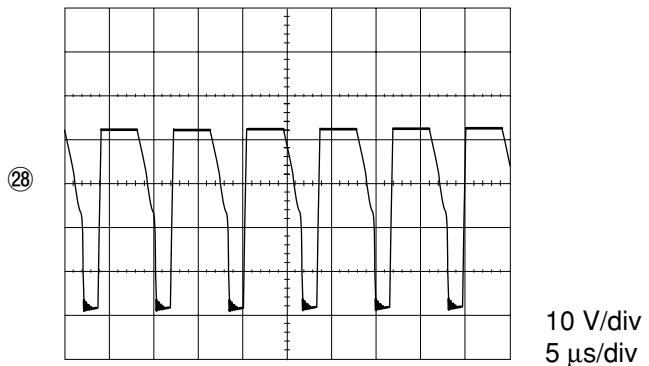
㉖ D823 ANODE (at POWER ON AC 110V)



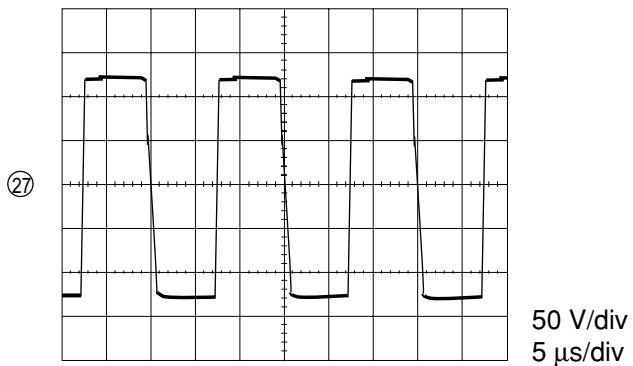
㉖ D823 ANODE (at POWER ON AC 240 V)



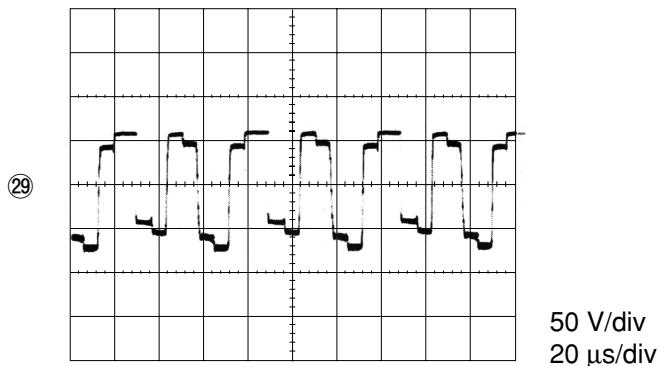
㉘ D822 ANODE (at POWER ON AC 240 V)



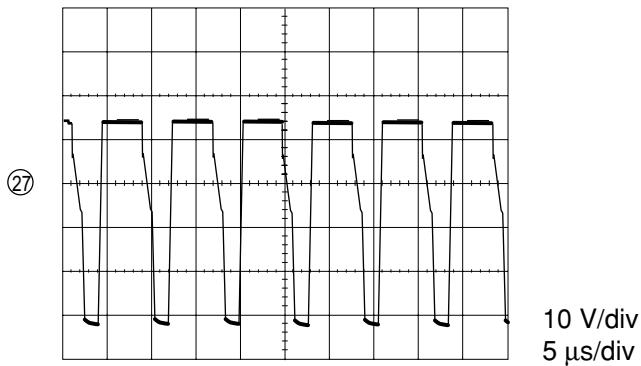
㉗ D827 ANODE (at POWER ON AC 110 V)



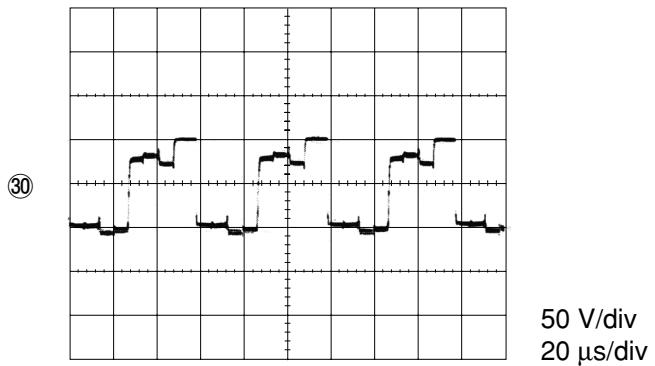
㉙ Q901 COLLECTOR (R-DRIVE)



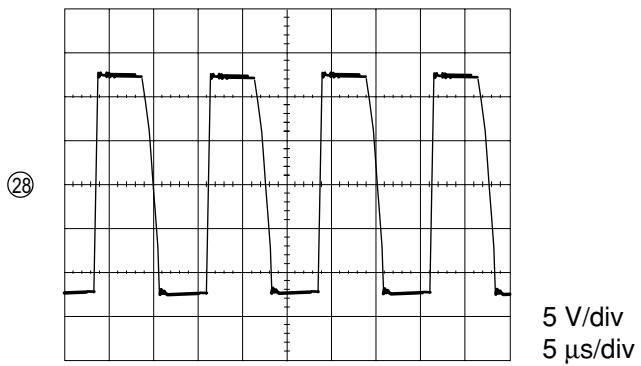
㉗ D827 ANODE (at POWER ON AC 240 V)



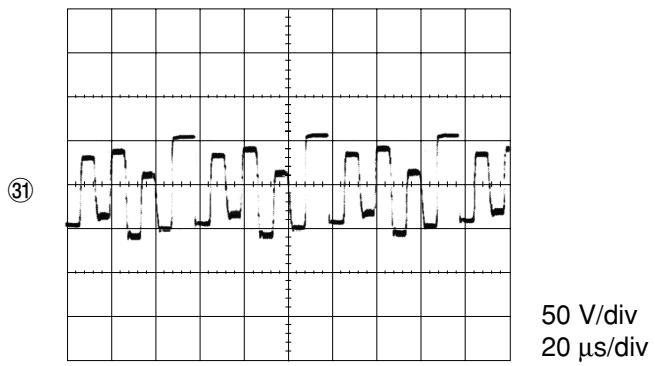
㉚ Q902 COLLECTOR (G-DRIVE)



㉘ D822 ANODE (at POWER ON AC 110 V)



㉛ Q903 COLLECTOR (B-DRIVE)



VOLTAGE CHART (1/2)
(POWER ON, COLOR BAR, VOLUME 10)

REF NO.	E	C	B
Q1	0	4.7	0.299

REF NO.	E	C	B
Q2	5.0	0	4.93

REF NO.	E	C	B
Q3	0	4.18	0.031

REF NO.	E	C	B
Q4	0	4.81	0.066

REF NO.	E	C	B
Q5	4.94	0	4.93

REF NO.	E	C	B
Q201	2.894	8.9	3.529

REF NO.	E	C	B
Q202	2.94	8.9	3.53

REF NO.	S	D	G
Q301	0	3.063	-0.11

REF NO.	S	D	G
Q303	2.698	4.91	3.3

REF NO.	E	C	B
Q304	1.843	6.71	2.445

REF NO.	S	D	G
Q305	6.11	8.98	6.71

REF NO.	E	C	B
Q306	8.98	0.995	8.9

REF NO.	E	C	B
Q307	0	8.9	0.014

REF NO.	E	C	B
Q309	2.669	0	2.037

REF NO.	E	C	B
Q310	0	0	2.481

REF NO.	E	C	B
Q311	3.921	0	3.29

REF NO.	E	C	B
Q402	0	4.93	0

REF NO.	E	C	B
Q403	26.88	0	26.87

REF NO.	E	C	B
Q404	12.22	0.08	12.15

REF NO.	E	C	B
Q405	0	0.004	0.667

REF NO.	E	C	B
Q408	0	8.65	0.009

REF NO.	E	C	B
Q409	1.391	8.27	1.945

REF NO.	E	C	B
Q410	1.563	8.9	2.174

REF NO.	E	C	B
Q411	4.19	8.9	4.82

REF NO.	E	C	B
Q412	2.312	0	1.705

REF NO.	E	C	B
Q413	4.18	8.9	4.82

REF NO.	E	C	B
Q414	8.9	2.551	8.28

REF NO.	E	C	B
Q415	1.159	8.28	1.707

REF NO.	E	C	B
Q416	8.9	3.049	8.27

REF NO.	E	C	B
Q417	2.21	0	1.578

REF NO.	E	C	B
Q418	3.314	8.91	3.944

REF NO.	E	C	B
Q601	0.008	93.2	0.339

REF NO.	E	C	B
Q602	0.019	115.5	-0.095

REF NO.	E	C	B
Q603	0.011	20.31	0.574

REF NO.	E	C	B
Q604	0.001	5.0	0

REF NO.	E	C	B
Q605	5.0	0	5.0

REF NO.	E	C	B
Q706	3.533	4.17	8.91

REF NO.	E	C	B
Q751	3.45	8.66	4.09

REF NO.	E	C	B
Q752	3.454	8.66	4.089

REF NO.	E	C	B
Q756	3.323	8.66	3.952

REF NO.	E	C	B
Q801	0	0	0.75

AC 110 V

REF NO.	E	C	B
Q802	11.76	13.20	11.97

AC 240 V

REF NO.	E	C	B
Q802	11.89	35.35	12.13

AC 110 V

REF NO.	E	C	B
Q803	0	0	0.754

AC 240 V

REF NO.	E	C	B
Q803	0	0.090	0.750

REF NO.	E	C	B
Q806	5.0	-0.45	4.98

REF NO.	E	C	B
Q811	118.7	0	118.4

REF NO.	E	C	B
Q901	8.58	137.2	8.95

REF NO.	E	C	B
Q902	8.5	148.6	8.95

REF NO.	E	C	B
Q903	8.54	141.9	8.95

REF NO.	E	C	B
Q904	2.451	8.58	2.766

REF NO.	E	C	B
Q905	2.333	8.5	2.7

REF NO.	E	C	B
Q906	2.439	8.54	2.787

REF NO.	E	C	B
Q907	0.201	8.7	0

REF NO.	E	C	B
Q908	1.686	0	0.988

REF NO.	E	C	B
Q951	1.595	8.96	2.219

REF NO.	E	C	B
Q952	8.26	3.261	7.63

REF NO.	E	C	B
Q953	0.666	5.27	2.294

REF NO.	E	C	B
Q954	2.116	5.8	2.748

REF NO.	E	C	B
Q955	5.18	8.97	5.8

REF NO.	E	C	B
Q956	118.2	59.3	117.6

REF NO.	E	C	B
Q957	0.125	59.3	0.677

IC1, M37272MA-055SP<NH1M,NH1C1M>
IC1, M37272M8-503SP<HT1M>

PIN NO.	VOLT (V)
1	4.18
2	4.81
3	0.023
4	0.021
5	0.03
6	5.0
7	0.016
8	2.899
9,10	4.98
11	4.52
12	4.98
13	4.89
14	4.94
15	2.091
16	0.225
17	1.994
18	0
19	2.207
20	2.273
21	0
22	4.94
23	4.92
24	4.94
25	4.92

IC2, SBX1981-72P

PIN NO.	VOLT (V)
1	4.98
2	5
3	0

IC3, S-24CO4BDP-1A

PIN NO.	VOLT (V)
1~4	0
5,6	4.94
7	5.0
8	4.94

IC4, M51943BSL-700A<NH1M>

IC4, BMR-0101D<NH1C1M,HT>

PIN NO.	VOLT (V)
1	4.94
2	0
3	4.92

IC102, NJM78M05FA

PIN NO.	VOLT (V)
1	5.0
2	0
3	8.98

PIN NO.	VOLT (V)
26	4.94
27	0.001
28	-0.001
29	1.843
30	5
31	3.55
32	4.94
33	3.45
34	4.94
35	0.011
36	4.91
37,38	4.94
39	0.015
40~42	0.013

IC301, TA1268N

PIN NO.	VOLT (V)
1	0
2	3.936
3	2.823
4	3.303
5	4.56
6	0.002
7~8	1.994
9	8.93
10	4.43
11	6.31
12	4.8
13	0
14	0.172
15	4.83
16	4.89
17	4.82
18	3.211
19	2.681
20	2.611
21	2.703
22	0.768
23	5.12
24	5.2
25	6.78
26	9.14
27	3.46
28	3.5
29	2.055
30	1.248
31	1.113
32	1.255
33	7.71
34	6.23
35	0
36	3.134
37	3.104
38	3.072
39	1.736
40	5.18
41	3.63

PIN NO.	VOLT (V)
42	4.66
43	4.61
44	1.837
45	3.908
46	8.99
47	3.53
48	8.9
49,50	7.9
51,52	0
53	2.792
54	4.55
55	2.787
56	0

IC401, MM1454XFBE

PIN NO.	VOLT (V)
1,2	3.996
3,4	0.006
5	4.004
6	4.009
7	4.008
8	0
9	4.008
10,11	4.005
12	4.006
13	4.007
14	4.64
15	3.996
16	8.66

IC402, BA3880FS

PIN NO.	VOLT (V)
1	0
2	3.21
3	6.25
4	8.65
5~15	4.43
16	0
17~20	4.43
21	8.66
22	6.21
23	0
24	3.2

IC403, TA1216AN

PIN NO.	VOLT (V)
1	4.85
2	5.43
3	5.41
4	5.39
5	3.194
6	5.58
7	0
8	3.967
9,10	0.013
11	4.71
12	0.062
13	0.79
14	0.78
15	5.15
16,17	3.45
18	4.78
19	1.775
20	4.73
21,22	4.24
23	4.89
24	8.66
25	4.88
26	4.87
27	4.74
28	4.89
29	4.88
30	4.87

IC405, NJM78M05FA

PIN NO.	VOLT (V)
1	5
2	0
3	8.91

IC406, MM1311AD

PIN NO.	VOLT (V)
1	4.24
2	4.88
3	4.24
4	4.88
5	4.22
6	8.05
7	4.24
8~10	4.88
11	4.22
12	8.06
13	4.35
14,15	4.88
16	0
17,18	3.45
19	0.018
20	4.21
21	0
22	4.85
23	4.092
24	4.09
25	4.82
26	4.25
27	3.943
28	8.9
29	3.466
30	4.88
31	4.48
32	4.88

IC404, AN5277

PIN NO.	VOLT (V)
1~2	0
3	25.55
4~6	0
7	12.72
8	0.635
9	0
10	26.77
11	17.49
12	12.65

IC407, TC90A45P

PIN NO.	VOLT (V)
1	0
2	2.201
3	2.741
4	2.268
5	1.288
6,7	0
8	4.96
9	0
10	2.169
11	2.207
12	3.37
13	3.05
14	1.565
15	2.693
16	4.88

IC701, CXA2104S

PIN NO.	VOLT (V)
1,2	4.05
3	3.5
4	3.45
5	0
6	4.04
7	4.018
8	4.051
9	3.88
10	4.67
11	4.03
12	1.255
13	1.254
14	0.001
15	3.7
16	8.82
17	4.047
18	4.043
19	4.015
20	3.88
21	4.045
22	3.924
23	4.033
24	1.734
25	4.052
26	4.042
27	1.688
28	3.931
29	0
30	3.98

IC802, SE120N

PIN NO.	VOLT (V)
1	119.3
2	90.4
3	0

IC803, NJM78M05FA
(AC 110 V)

PIN NO.	VOLT (V)
1	5
2	0
3	13.36

IC803, NJM78M05FA
(AC 240 V)

PIN NO.	VOLT (V)
1	5.04
2	0
3	35.21

IC501, LA7832

PIN NO.	VOLT (V)
1	0.001
2	13.93
3	25.92
4	0.763
5	0.693
6	25.7
7	1.612

IC601, NJM4558DD

PIN NO.	VOLT (V)
1	25.25
2~4	0.011
5	6.17
6	6.16
7	3.012
8	25.7

IC801, STR-F6656

PIN NO.	AC 110V	AC 240 V
1	1.545	0.253
2	1.104	0.064
3	268.0	372.9
4	15.29	0.085
5	0	0

TU101

PIN NO.	VOLT (V)
1	1.534
2	5.81
3	4.69
4	3.45
5	3.5
6	0
7	4.69
8	0
9	32.31
10,11	0

**VOLTAGE CHART (2/2)
(STANDBY)**

REF NO.	E	C	B
Q1	0	5	0.067

REF NO.	E	C	B
Q2	0.025	4.92	5

REF NO.	E	C	B
Q3	0	5	0

REF NO.	E	C	B
Q4	0	5	0

REF NO.	E	C	B
Q5	4.98	4.95	4.32

REF NO.	E	C	B
Q801	0	12.48	0.002

IC1, M37272MA-055SP<NH1M,NH1C1M>

IC1, M37272M8-503SP<HT1M>

PIN NO.	VOLT (V)
1,2	5
3	3.432
4	1.194
5	0.023
6	5
7	0.01
8	2.945
9	4.98
10	4.99
11	5
12	4.98
13	0.003
14	4.98
15	-
16	0.003
17	0
18	0
19	2.208
20	2.261
21	0

PIN NO.	VOLT (V)
22,23	4.98
24	4.97
25	4.95
26	0.002
27	4.99
28	4.95
29	0.12
30	5
31	4.97
32	5
33	4.97
34	5
35	0.006
36	4.94
37	0.025
38	4.97
39~42	0.007

IC2, SBX1981-72P

PIN NO.	VOLT (V)
1	4.99
2	5
3	0.067

IC3, S-24CO4BDP-1A

PIN NO.	VOLT (V)
1~4	0
5~7	5
8	4.98

IC4, M51943BSL-700A<NH1M>
IC4, BMR-0101D<NH1C1M,HT>

PIN NO.	VOLT (V)
1	4.98
2	0
3	4.95

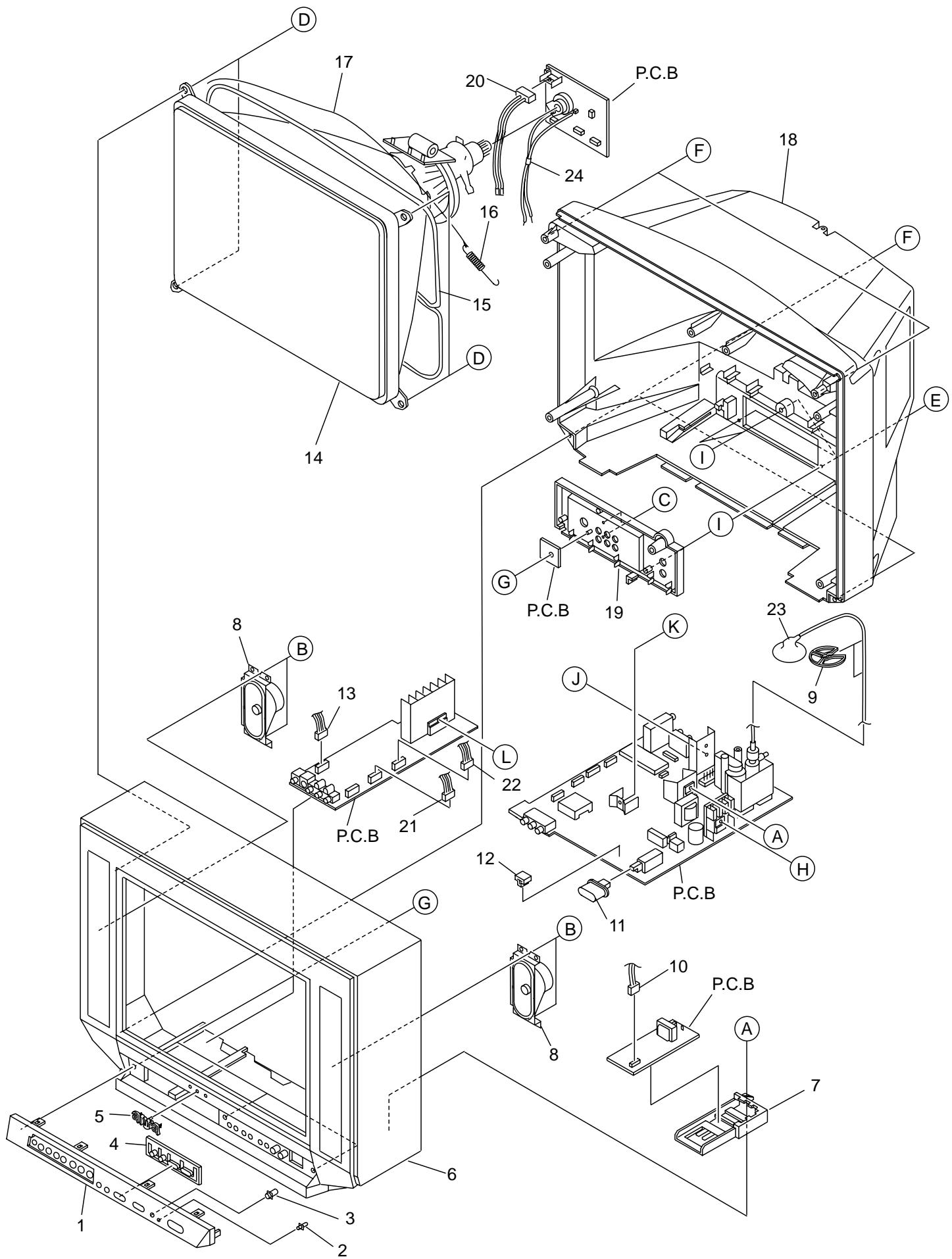
IC601, NJM4558DD

PIN NO.	VOLT (V)
1	0.562
2~5	0
6	0.185
7	0.175
8	0.774

IC803, NJM78M05FA

PIN NO.	VOLT (V)
1	5
2	0
3	12.70

MECHANICAL EXPLODED VIEW 1 / 1



MECHANICAL PARTS LIST 1 / 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-JE7-005-110		PANEL,MAIN 4<NH1M,NH1C1M>
1	8A-JE7-006-010		PANEL,MAIN HT<HT>
2	8Z-JE7-005-010		LENS,LED
3	8Z-JE7-006-010		LENS,RC
4	8Z-JE7-003-010		KEY,MAIN
5	8Z-JE7-008-010		BADGE,AIWA ST 52.5
6	8Z-JE7-001-310		CABI,FR
7	8Z-JE7-201-010		HLDR,PWB
8	8Z-JB4-620-010		SPKR,6*12 80HM 10W
9	87-A90-332-010		HLDR,SF-2001 HV CABLE
▲	10 8A-JE7-630-010		AC CORD ASSY,NH BLK AJE
11	8A-JEH-004-010		BTN,POWER 2
12	84-LB3-216-010		HLDR,LED
13	8A-JET-663-010		CONN ASSY,4P SP-21
▲	14 8A-JE7-631-010		CRT,A51LTH196X01 (U)<NH1M,HT>
▲	14 8A-JE7-639-010		CRT,A51LTH197X01<NH1C1M>
15	87-A50-619-010		DGC,21' 25 OHM-TYPE 8
16	83-JT1-217-010		SPR-E,EARTH
17	8Z-JE7-607-110		CONN ASSY,1P CRT-GND
18	8Z-JE7-012-010		CABI,REAR
19	8A-JE7-007-010		PANEL,REAR 3
20	8A-JE7-620-010		CONN ASSY,2P VM-NK
21	8A-JE7-613-010		F-CABLE,11P 2.0 70MM
22	8A-JE7-612-010		F-CABLE,8P 2.0 70MM
▲	23 8Z-JE7-609-010		ANODE-CAP,ZJE-7
24	8Z-JE7-610-010		HV-CABLE, 2P ZJE-7FOC-SCR
A	87-067-758-010		BVT2+3-12 W/O SLOT
B	87-078-070-010		BVIT3B+4-12
C	87-B10-311-010		BVIT3B+3-10 BLK
D	86-IBB-206-010		S-SCREW,ASSY TV5-40 W20
E	87-067-690-010		TAPPING SCREW, BVIT3+3-12
F	87-067-844-010		BVT2+4-16 BLK
G	87-067-680-010		BVI T3+3-10
H	87-067-619-010		BVT1+3-12
I	87-067-058-010		FW 3.2-8-0.5
J	87-067-579-010		TAPPING SCREW, BVT2+3-8
K	87-067-641-010		UTT2+3-8(W/O SLOT)BL
L	87-067-688-010		BVTT+3-6

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange	PT	Transparent Pink



アイワ株式会社 〒110-8710 東京都台東区池之端1-2-11 ☎03(3827)3111 (代表)
AIWA CO., LTD. 2-11, IKENOHATA 1-CHOME, TAITO-KU, TOKYO 110, JAPAN TEL:03 (3827) 3111